Message

From: Barbara J. Goldsmith [bjg@nrdonline.org]
Sent: 10/5/2017 6:10:04 PM
To: Kelly, Albert [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=08576e43795149e5a3f9669726dd044c-Kelly, Albe]
CC: Falvo, Nicholas [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=424ac90ea7d8494a93209d14d37f2946-Falvo, Nich]
Subject: Change in Plans -- October 24, 2017 Workshop
Attachments: Announcement! October 24 2017 Specialty Workshop at George Washington University.pdf

Dear Albert —

An update — we are in an oversold situation on registrations relative to the number of available seats in the space we reserved for the October 24 workshop at GW. This factor, coupled with a broader scope agenda than originally envisioned, has forced us to make a tough decision and that is to postpone the Workshop and merge it into the Group's larger 2018 Symposium program. The Group's Symposium is a major program held every 2 years. We will be contacting all concerned (speakers; registrants; others) relative to this change over the next few days. Hopefully, we can come back to you with details when available in the hope that you can participate in the 2018 Symposium, but given the constraints outlined, you are now free to clear the October 24 date for other activities. We apologize for any inconvenience this has or may cause.

Aside from this change in our October 24 Workshop plans, we will look for other opportunities to engage with you and your colleagues in the remainder of this year.

Please confirm receipt of this message so that I know that you got it. Many thanks.

Regards,
Barbara

Barbara J. Goldsmith
President, Barbara J. Goldsmith & Company
Executive Director, Ad-Hoc Industry Natural Resource Management Group
Washington + 1 Ex. 6
Brussels + Ex. 6
Mobile + 1 Ex. 6
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www.bjgco.com
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All-Day Specialty Workshop

Blueprint for Change

New Approaches and Needed Changes to Managing Natural Resource Risks, Liabilities and Opportunities

Tuesday, October 24, 2017
9:00 AM to 5:30 PM

The George Washington University
Science and Engineering Hall
800 22nd Street NW
Washington, DC

Web Link
Register Now Link

Reconsidering the Relationship between Superfund and Natural Resource Damages, Minimizing the Need for Litigation, Leveraging Opportunities Spurred by Regulatory Reform, PRPs Taking Charge, Public/Private Partnering, Adaptive Management, Restoration Banks, Early Restoration Projects/Credits and Much More to be Discussed

Ad-Hoc INDUSTRY
NATURAL RESOURCE MANAGEMENT GROUP

THE GEORGE WASHINGTON UNIVERSITY
WASHINGTON, DC

Presented by

Ad-Hoc Industry Natural Resource Management Group
The George Washington University Environmental and Energy Management Institute In cooperation with: Environmental Law Institute

The Ad-Hoc Industry Natural Resource Management Group and The George Washington University Environmental and Energy Management Institute will convene A Specialty Workshop: "Blueprint for Change: New Approaches and Needed Changes to Managing Natural Resource Risks, Liabilities and Opportunities" on Tuesday, October 24, 2017 at The George Washington University's state of the art Science and Engineering Hall in Washington, DC.

The Workshop will explore what government and business can do now (potential quick victories) to cost-effectively preserve, develop and restore natural resources in the Trump Administration era and beyond. The Workshop will look at current influencers (risk, climate policy, regulatory reform, other) and current underpinnings of practice (legal, regulatory, methodological, other) of natural resource-related matters of interest to companies and other stakeholders -- now and moving forward -- as we collectively examine needed changes to result in the most effective practice possible. The Workshop will also look at some outside-the-box approaches in both public and private sectors aimed at maximizing benefits, minimizing costs and effectuating actions that can be swiftly and holistically implemented and meet or exceed programmatic or other objectives. The Workshop will result in a targeted set of actions -- both outside and inside statutory and regulatory paradigms -- especially those that can be accomplished now or soon. The Workshop will entail thought-provoking presentations and opportunity for highly interactive audience exchange. Representatives of industry and government, attorneys, consultants, academics in a variety of disciplines, persons working in think tanks and public and private sector research and conservation organizations will find this Workshop well worth their time as we develop our collective Blueprint for Change.

Message

From: Charles Jones [cajones@tamu.edu]
Sent: 1/30/2018 8:29:47 PM
To: Rick Perry [The.Secretary@hq.doe.gov]; Kelly, Albert [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=08576e43795149e5a3f9669726dd044c-Kelly, Albe]; khwhite@texaspolicy.com
CC: French Hill Ex. 6 ; jarad.daniels@hq.doe.gov; mrmaddox@hq.doe.gov; Clark, Steve [steve@zerosinc.com]; Keith Coble Ex. 6
Subject: Update on ZEROS facility development near Houston
Attachments: ZEROS Update January 2018.pdf

Please find attached an update on development of the first commercial ZEROS facilities designed to produce base-load electricity from waste --- with no air, water, or greenhouse gas emissions. The facility is expected begin operating in late 2019 or early 2020.

Please note that we are requesting that you or your staff participate in a ribbon cutting in the Houston area in mid-2018.

Steve L. Clark and Charles Allan Jones

To: Administrator Rick Perry
Mr. Albert Kelly
Ms. Kathleen Hartnett White

From: Steve L. Clark
Charles Allan Jones

Date: January 30, 2018

Dear Administrator Perry, Mr. Kelly, and Mrs. White:

The purpose of this memo is to follow up on previous communications to keep you and your key staff apprised of progress in financing, designing, and building several ZEROS (Zero-emission Energy Recycling Oxidation System) facilities.

The following steps toward construction and operation of several ZEROS facilities, initially in the Houston area, have been accomplished in the last several months.

- Several limited liability companies have been formed to develop and operate ZEROS facilities.
- New York investment bankers have committed to issuing public/private bonds to build and operate the first ten facilities.
- Sale of bonds for the first facility is expected to be complete within 90 days, with bond sales for the next three facilities scheduled every 90 days after that.
- ZEROS power plant designs are complete, and agreements are in place to begin design of industrial sites and brick-and-mortar buildings to support those facilities.
- Each of the first several facilities is expected to begin to generate at least 50 MW of base-load electricity (as well as large amounts of pure carbon dioxide and distilled water) within 18 months of bond sales. Production of 40 million gallons per year of zero-sulfur diesel fuel will begin approximately two years later.
- Fuel sources are expected to be a combination of toxic/hazardous industrial wastes (ideally including waste from Superfund sites), municipal solid waste, and possibly coal.
- Steve Clark, the inventor of ZEROS, has several transferrable permits allowing his companies to transfer, dispose of, and delist/dispose of toxic and hazardous wastes. The first several ZEROS facilities in the Houston area are expected to be capable of receiving and processing such wastes, including from Superfund sites.

We hope that you and other DOE, EPA, and other administration representatives will be able to participate in the ribbon cutting for the first new ZEROS facility (in the Houston area) in mid- to late-2018.

We also request your assistance in establishing communications with Superfund administrators to begin discussing transfer of solid and liquid wastes from those sites for destruction and delisting at the first ZEROS facility, possibly in 2019.

We would greatly appreciate your response by return email or phone to: Steve L. Clark Ex. 6 or Charles Allan Jones Ex. 6

For your convenience, I have added the following summary of ZEROS characteristics, most of which we have shared with you in previous communications.

- ZEROS is a commercial-scale technology that has been used in numerous oil field and military waste cleanup projects, beginning in the 1990s. These facilities were operated to clean up large scale hazardous and toxic waste sites with zero air or water emissions. The facilities described above will be the first commercial ZEROS units to be constructed and operated specifically to produce and sell base-load electricity, zero-sulfur diesel, pure carbon dioxide, and distilled water.
- In addition to totally destroying organic and hydrocarbon toxic and hazardous wastes the ZEROS process denatures asbestos, captures heavy metals, and captures as salts any acid gases (from nitrogen, sulfur, and chlorine in the fuel) produced in the oxidation process.
- The new ZEROS facilities described above will be fueled by a diverse mix of solid and liquid hydrocarbon and organic wastes. They can also use traditional fuels (such as coal, lignite, and natural gas) as fuel, typically consuming (depending on the fuel type and products desired) 1,000 to 4,000 tons per day.
- Because ZEROS uses pure oxygen rather than air as the oxidant, it produces 2.0 to 2.5 times as much heat energy per unit of fuel as traditional incineration, greatly reducing fuel costs and conserving fuel resources.
- ZEROS facilities have no smoke stack, produce no air or water pollution, and all carbon dioxide that is produced by the oxidation process is captured for sale/sequestration.
- Zeros facilities produce for sale large amounts of base-load electricity, pure carbon dioxide, distilled water, several other minor products, and valuable carbon dioxide credits. With the addition of standard oil refinery equipment, it will produce zero-sulfur diesel fuel. If the oxygen is produced by an on-site air separation unit (rather than purchased), the facility will also sell pure nitrogen and argon gases.
- The pure carbon dioxide captured by the facility will likely be bought by the oil industry and injected into oil reservoirs to enhance crude oil recovery. Nearly all of that injected CO_2 will stay within the reservoir, greatly reducing GHG emissions and providing large amounts of carbon credits for sale to industry.

Message

From: Benjamin E. Quayle [bquayle@hhqventures.com]
Sent: 10/5/2017 2:10:16 AM
To: Kelly, Albert [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=08576e43795149e5a3f9669726dd044c-Kelly, Albe]
Subject: Re: Update
Attachments: Memo Regarding Remaining Issues with AOC.docx

Thanks Mr. Kelly. Attached please find a brief memo regarding the few outstanding issues Troy would like to resolve prior to signing the AOC. As noted previously, Region 2 requires a response from Troy by Friday. However, I believe an additional meeting would be very beneficial to resolve the differences and expedite the remediation process, which is what both parties want.

Thanks for your time.

Best,

Ben Quayle

From: "Albert "Kell" Kelley" <kelly.albert@epa.gov>
Date: Tuesday, October 3, 2017 at 7:22 AM
To: "Benjamin E. Quayle" <bquayle@hhqventures.com>
Subject: RE: Update

Congressman, just wanted you to know that I am inquiring and will get back with you shortly

Albert Kelly
Senior Advisor to the Administrator
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Ex. 6

From: Benjamin E. Quayle [mailto:bquayle@hhqventures.com]
Sent: Monday, October 2, 2017 1:36 PM
To: Kelly, Albert <kelly.albert@epa.gov>
Subject: Update

Kell,

I just tried calling you but your voicemail is full. When you have a moment, please give me a call on my cell **Ex. 6** One thing of immediate importance is that Troy has not received an official extension from Region 2. In fact, Region 2 stated that Troy must respond to the latest draft AOC by Friday to determine whether they will sign "as is" or not. It would be helpful to get the extension so we can continue working through some of these issues.

I look forward to speaking with you.

Best,

Ben

Hon. Ben Quayle

Partner
HHQ Ventures, LLC
M: Ex. 6

HOBART HALLAWAY & QUAYLE VENTURES, LLC

MEMORANDUM

To:	**Albert "Kell" Kelly**
From:	**HHQ Ventures, LLC**
Re:	**Summary of Remaining Issues with Region 2's Proposed Administrative Order on Consent for the Troy Chemical Corporation, Inc. Newark Plant Site**
Date:	**October 4, 2017**

Troy Chemical Corporation, Inc. (Troy) received a revised Administrative Order on Consent (AOC) from EPA Region 2 on the evening of September 29, with a cover email that a final decision on the AOC is needed within one week. As with prior versions, EPA rejected many of Troy's proposed changes. Nonetheless, in the spirit of compromise, Troy is willing to forgo the bulk of its proposed changes and focus on only a few key issues in order to finalize the agreement. The following is a brief summary of the remaining issues with regard to the AOC:

- **Covenant not to sue:** The AOC includes a provision that Troy covenants not to sue the United States with regard to matters addressed by the AOC. Troy proposed limiting the covenant not to sue to any future claims against EPA, instead of the United States as a whole, since the U.S. Government is potentially liable for contributing to the contamination at the site. The ditch/culvert that traverses the Troy site historically carried industrial wastewater from a large section of an area of Newark that has been heavily industrialized since the early 20th century. Initial research indicates that several upstream and on-site industrial sources had strong connections with the U.S. Government, including as government contractors and suppliers during World War II, which may trigger liability for the government either as an "operator" under CERCLA or based on specific contract provisions. In light of this information, we believe the covenant not to sue in ¶89 should be limited to future claims against EPA, rather than the United States as a whole. **EPA's Position: At our Sept. 14 meeting, Region 2 stated they would need approval from the Department of Justice to make this revision, and that Troy would need to provide evidence that a federal entity is a PRP. Troy agreed to get further information to EPA. However, the 9/29 version of the AOC received from EPA retained the standard covenant that would release the United States as a whole.**

- **Findings of Fact:** The Findings of Fact in the AOC only discuss historic contamination that originated on the Troy plant site. However, the principal contaminated area on the site is a drainage ditch which was formerly part of the City of Newark industrial and storm water system. Therefore, contaminants from upgradient industrial facilities as well as from former on-site entities are present in the ditch at the Troy plant site. Troy has proposed a revised Findings of Fact section that provides a more balanced and complete set of facts regarding the site

and potential sources of contamination. This issue is important to avoid public misperception of the nature and sources of the contamination at Troy's plant site. **EPA's Position: Region 2 accepted revising the headings to "*EPA's* Findings of Fact" and "*EPA's* Conclusions of Law", but did not agree to further changes to the facts.**

- **EPA Oversight of Offsite Waste Shipments:** The AOC contained standard language that EPA will oversee all offsite waste shipments. This standard language does not work for operating sites like Troy's that regularly generate waste from operations that are unrelated to the remediation work under CERCLA. Troy suggested limiting EPA oversight of off-site waste shipments/releases to wastes *generated by the remediation work* in three places, but EPA accepted only one of those changes. In ¶41(a), EPA accepted our revision that EPA's oversight of off-site waste shipment is limited to the waste generated by the remediation work. However, EPA rejected a similar change in paragraph 41(b) with regard to out of state shipments, which appears inconsistent. EPA also rejected a similar change in ¶44(b). This is an important issue to be corrected to ensure that the AOC does not interfere with Troy's on-going plant operations. **EPA's Position: Given that EPA accepted this revision in ¶41(a), it is unclear why EPA rejected a similar change in paragraphs 41(b) and 44(b).**

- **Limitation of Oversight Costs:** EPA rejected Troy's suggested revision to ¶82 that indirect costs would be reduced by 50% if Troy provided timely, adequate deliverables. As we pointed out to Region 2, EPA's Recent Superfund Task Force Report recommends reducing oversight costs "for PRPs that perform timely, high quality work. This may include a compromise that reduces indirect cost charging." Report at v. The Report also recommends that EPA: "Develop a plan to provide financial incentives in the form of reduced oversight to PRPs who perform timely, quality work under an agreement by reducing the costs associated with EPA's oversight, including adjustments to indirect costs." Report at 10. Based on this recent directive from EPA Headquarters, Troy is disappointed that Region 2 did not agree to provide this proposed provision re using oversight cost reductions to incentivize timely, high quality deliverables under the AOC. **EPA's Position: Region 2 said the Regions have been directed by Headquarters that the findings of the Task Force Report will not be implemented until sometime in 2018 so they have no basis to consider this request now. EPA representatives also stated that the overhead rate for indirect costs is set by Headquarters not the Region.**

Message

From: Benjamin E. Quayle [bquayle@hhqventures.com]
Sent: 12/29/2017 8:06:58 PM
To: Kelly, Albert [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=08576e43795149e5a3f9669726dd044c-Kelly, Albe]
Subject: Boundary revision
Attachments: Memo Regarding Boundary Revision of NPL Site.docx

Mr. Kelly,

I hope you are doing well and had a great Christmas. I wanted to provide you a brief update on Troy Corp and request a brief call at your convenience.

Troy and Region 2 are working well together to determine the proper remedy for its site. Troy has submitted various documentation to the Region and they have agreed to provide responses in a timely fashion.

One thing I would like to discuss with you is regarding the boundary definition for Pierson's Creek NPL listing. As the attached memo details, Troy's plant site has already been carved out for separate remediation from the broader superfund site. Troy has voluntarily entered an AOC to work with EPA to determine the remedy for its site.

Troy looks forward to quickly and efficiently remediating its site. However, its inclusion in the boundary for the Pierson's Creek NPL listing continues to be a stigma on the company and has a negative impact on its business. Troy would like to discuss the possibility of redefining the boundaries so that it does not include its operational plant site which is under a separate AOC to remediate.

Troy currently has an appeal of the NPL listing that has been stayed pending negotiations. However, they need to provide guidance on whether they plan to continue its appeal by January 18, 2018. Consequently, it would be helpful if we could schedule a meeting with the proper folks at EPA HQ to discuss this matter the week of January 8th, 2018.

Thanks for considering this. If I don't speak to you beforehand, I hope you and your family have a Happy New Year.

Best,

Ben

Hon. Ben Quayle
Partner
HHQ Ventures, LLC
M: Ex. 6

HOBART HALLAWAY & QUAYLE VENTURES, LLC

MEMORANDUM

To: **Albert "Kell" Kelly**
From: **HHQ Ventures, LLC**
Re: **Troy Chemical Corporation Inc. proposal to remove the designation of the Newark Plant Site as an NPL site**

Date: **December 28, 2017**

Troy proposes that based upon the points listed below it is appropriate now for EPA to determine that the Troy Newark Manufacturing Plant site is not included within the Pierson's Creek NPL site.

1. No environmental purpose is served by including Troy's Newark Plant within the Pierson's Creek NPL site.

   - Troy is committed to addressing contamination at its Newark Plant.

   - Troy and EPA have agreed on a Consent Order to get to remedy selection and Troy is implementing that Order.

   - Troy will implement remediation once the remedy is selected.

2. The only consequence of including the Troy Newark Plant within the Pierson's Creek NPL site is the stigma that Troy is now subject to.

   - Customers are concerned about products produced at an NPL site.

   - Creditors may raise questions.

3. The NPL listing document indicates that Pierson's Creek begins below the Troy Newark Plant, so remediating the Newark Plant separately from the Pierson's Creek NPL site is consistent with the listing decision.

4. The record supporting the listing shows that there is no real risk from current conditions at the Newark Plant. In addition, EPA now has the benefit of data provided by Troy reflecting the extensive investigation and remediation done already at the property prior to the NPL listing.

   - Approximately 95% of the ground surface of the site is covered with structures or asphalt/concrete pavement, which serves as a barrier between potentially contaminated

soil/material and the on-site receptors. Fencing prevents outside access, and the site is in a highly-industrialized area.

- The site received a no further action (NFA) letter from NJDEP regarding deep groundwater. There is no potable use of deep groundwater in this area of Newark and that groundwater will never be used for potable purposes for reasons having nothing to do with contamination.

- Material in the concrete ditch/culvert (a former City of Newark storm sewer which is the main area of contamination on the site) is contained and covered. The ditch/culvert is sealed at both the northern and southern ends.

5. Considering the schedule in its pending appeal challenging the NPL listing, Troy would like a response as soon as possible but preferably not later than January 15, 2018.

Message

From: Benjamin E. Quayle [bquayle@hhqventures.com]
Sent: 11/3/2017 9:22:14 PM
To: Kelly, Albert [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=08576e43795149e5a3f9669726dd044c-Kelly, Albe]
CC: Al Gerardo [gerardoa@troycorp.com]; Rashid G. Hallaway [rhallaway@hhqventures.com]
Subject: Troy Update
Attachments: ScanAttachment - 1[1].pdf

Mr. Kelly,

I hope you are doing well. I wanted to let you know that Troy executed the AOC with Region 2 today. As the document attached states, Troy still has some ongoing concerns, however, they want to move the process forward and get to a remedy that works for all parties as quickly as possible.

I will be reaching out to you to keep you apprised of this matter. I want to thank you for all of your help and look forward to working with you in the future. Have a great weekend.

Best,

Ben

Hon. Ben Quayle
Partner
HHQ Ventures, LLC
M: **Ex. 6**

Chiesa Shahinian & Giantomasi PC

DENNIS M. TOFT
One Boland Drive
West Orange, NJ 07052
Ex. 6
Fax: 973.530.2214
dtoft@csglaw.com

csglaw.com

November 3, 2017

Amelia Wagner, Esq.
USEPA – Region 2
290 Broadway, 19th Floor
New York, NY 10007-1866

Re: Troy Chemical Company

Dear Ms. Wagner:

On behalf of our client Troy Chemical Corporation ("Troy"), enclosed is the executed Administrative Settlement Agreement and Order on Consent ("AOC" or "Agreement") for the Troy Chemical Corporation, Inc. property at 1 Avenue L in Newark, NJ, which EPA has identified as operating Unit 2 of the Pierson's Creek Superfund Site.

Troy has entered into the Agreement in an effort to expedite the verification of a remedy for its property. Due to Troy's property having been extensively studied for more than 30 years, additional investigation required under the Agreement should be minimal. The work Troy has performed to date has demonstrated that a site-wide containment remedy is the only technologically feasible, cost effective remedy consistent with the National Contingency Plan for the site.

Although Troy has executed the AOC, it continues to have concerns about the document, as well as the implementation of the Remedial Investigation and Feasibility Study ("RI/FS") contemplated therein.

1. USEPA Findings of Fact. Troy is concerned that the Findings of Fact in the Agreement do not accurately present the full background of the Troy property or the responsibility for its contamination and inaccurately singles out Troy's former operations on what is now its plant site as the sole source of contamination. Other documents that are part of the record for the Pierson's Creek Superfund Site demonstrate that the current Troy site is not the source of the majority of the contamination on the property. Other contamination arose from prior operators at the site (including a prior company with a similar name, but different ownership) and parties upstream of the Troy property that discharged to a City of Newark drainage channel that previously ran through the Troy property. As previously discussed with Sarah Flanagan of the EPA Region 2 Regional Counsel's Office, the EPA will accept from Troy and place in the Administrative Record a more accurate statement of the factual background of this site.

2. Covenant Not to Sue the United States. Troy's interpretation of this section of the Agreement is that this covenant only applies to contribution claims for the costs of performing the RI/FS work. Troy agreed to sign the AOC including a covenant not to sue the United States reluctantly, as Troy has in its possession documentation which it will share with the USEPA in the near future, indicating that agencies of the federal government are potentially responsible parties under CERCLA. Troy reserves its rights to seek contribution from these agencies for costs it incurred prior to executing the AOC and for future remediation costs.

3. Oversight Costs. As noted in the Superfund Task Force Report, cooperating parties like Troy should not be faced with exorbitant oversight costs. Although we understand that the Task Force's recommendations have not yet been implemented, Troy will seek and expects to be the beneficiary of any future changes in policy, directives or guidance documents that limit oversight costs.

4. Dispute Resolution. Troy fully intends to perform all required work under the AOC and thereby avoid the need to invoke the dispute resolution provision in the Agreement. Should the need arise, however, Troy reserves its rights, as set forth in Paragraph 65 of the Agreement, to elevate an issue to dispute resolution. In that event, Troy will seek review from any EPA official at a higher level than that provided in the AOC, as contemplated by the plain language of the AOC and as pointed out to Troy by USEPA.

5. Statement of Work ("SOW"). As noted above, the Troy property has been extensively investigated for more than 30 years. All of this data have been shared with USEPA. The Remedial Investigation Work Plan will be based upon filling limited gaps in the available data and will reflect prior consideration of alternative remedies. Troy's Newark plant is an active manufacturing facility, and the Work Plan will be prepared and implemented to avoid interference with operations. Troy is prepared to proceed to implement the SOW and comply with the AOC. As you know, Troy has continued to work during the negotiations of the Settlement Agreement and has been submitting monthly progress reports in anticipation of the execution of the AOC. Troy looks forward to receiving the fully executed document and to proceeding promptly through the RI/FS process so that a remedy can be implemented as quickly as possible.

Very truly yours,

DENNIS M. TOFT
Member

DMT:da
Enclosures

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 2

IN THE MATTER OF: Pierson's Creek Superfund Site Troy Chemical Corporation, Inc. Respondent Proceeding Under Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9604, 9607 and 9622.	U.S. EPA, Region 2 CERCLA Docket No. 02-2016-2026

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
ADMINISTRATIVE SETTLEMENT AGREEMENT
AND ORDER ON CONSENT FOR
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
PIERSON'S CREEK SUPERFUND SITE
OPERABLE UNIT NUMBER 2

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ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT
FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY
OPERABLE UNIT NO. 2

I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent ("Settlement Agreement") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and Troy Chemical Corporation, Inc. ("Respondent"). The Settlement Agreement concerns the preparation and performance of a remedial investigation and feasibility study ("RI/FS") for Operable Unit ("OU") 02 consisting of Respondent's property located at One Avenue L, Newark, Essex County, New Jersey ("Property") at or in connection with the Pierson's Creek Superfund Site ("Site") and payment of Future Response Costs incurred by EPA in connection with the RI/FS for OU 02.

2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9604, 9607, and 9622 ("CERCLA"). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2923 (Jan. 29, 1987), and further delegated to Regional Administrators by EPA Delegation Nos. 14-14-C (Administrative Actions Through Consent Orders, Apr. 15, 1994). These authorities were further redelegated by the Regional Administrator of EPA, Region 2 to the Director of the Emergency and Remedial Response Division by Regional Delegation 14-14-C on November 23, 2004.

3. In accordance with Sections 104(b)(2) and 122(j)(1) of CERCLA, 42 U.S.C. §§ 9604(b)(2) and 9622(j)(1), EPA notified the Federal natural resource trustees on December 1, 2014, of negotiations with potentially responsible parties regarding the release of hazardous substances that may have resulted in injury to the natural resources under Federal trusteeship.

4. EPA and Respondent recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Settlement Agreement do not constitute an admission of any liability. Respondent does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of fact in Section V and the conclusions of law and determinations in Section VI. Respondent agrees to comply with and be bound by the terms of this Settlement Agreement and further agrees that it will not contest the basis or validity of this Settlement Agreement or its terms in any proceeding to implement or enforce this Settlement Agreement.

II. PARTIES BOUND

5. This Settlement Agreement applies to and is binding upon EPA and upon Respondent and its successors and assigns. Any change in ownership or corporate status of the Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter such Respondent's responsibilities under this Settlement Agreement.

6. Respondent shall ensure that its personnel, contractors and subcontractors engaged in implementing this Settlement Agreement receive a copy of this Settlement Agreement and comply with this Settlement Agreement. Respondent shall be responsible for any noncompliance with this Settlement Agreement by its personnel, contractors and subcontractors.

7. The undersigned representative of Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement Agreement and to execute and legally bind Respondent to this Settlement Agreement.

III. STATEMENT OF PURPOSE

8. In entering into this Settlement Agreement, the objectives of EPA and Respondent are: (a) to determine the nature and extent of contamination and any threat to the public health, welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants, or contaminants at the Property, as defined below, or in areas necessary to select a remedy for OU2, by conducting additional sampling and preparing a RI Report as specifically set forth in the Statement of Work ("SOW") attached as Appendix A to this Settlement Agreement; (b) to identify and evaluate remedial alternatives to prevent, mitigate, or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants, or contaminants at or from the Property, by preparing an FS as specifically set forth in the SOW; and (c) to recover response and oversight costs incurred by EPA with respect to this Settlement Agreement.

9. The Work conducted under this Settlement Agreement is subject to approval by EPA and shall provide all appropriate and necessary information to assess conditions at the Property and evaluate alternatives to the extent necessary to select a remedy that will be consistent with CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300 ("NCP"). Respondent shall conduct all Work under this Settlement Agreement in compliance with CERCLA, the NCP, the SOW and all applicable EPA guidances, policies, and procedures.

IV. DEFINITIONS

10. Unless otherwise expressly provided in this Settlement Agreement, terms used in this Settlement Agreement that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement Agreement or its appendices, the following definitions shall apply:

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9675.

"DOJ" shall mean the United States Department of Justice and its successor departments, agencies, or instrumentalities.

"Day" or "day" shall mean a calendar day. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or federal or state holiday, the period shall run until the close of business of the next working day.

"Effective Date" shall mean the effective date of this Settlement Agreement as provided in Section XXIX.

"EPA" shall mean the United States Environmental Protection Agency and its successor departments, agencies, or instrumentalities.

"EPA Hazardous Substance Superfund" shall mean the Hazardous Substance Superfund established by the Internal Revenue Code, 26 U.S.C. § 9507.

"Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports, and other deliverables submitted pursuant to this Settlement Agreement, in overseeing implementation of the Work, or otherwise implementing, overseeing, or enforcing this Settlement Agreement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Section XII (Site Access and Institutional Controls) (including, but not limited to, the cost of attorney time and any monies paid to secure access, including, but not limited to, the amount of just compensation), Paragraph 44 (emergency response), Paragraph 88 (Work takeover), and all costs incurred in connection with Section XV (Dispute Resolution) should EPA prevail. Future Response Costs shall also include Agency for Toxic Substances and Disease Registry costs. Future Response Costs will not include any EPA or DOJ costs related to the pending matter *Troy Chemical Corporation v. EPA*, Case No. 14-1290 (D.C. Cir.).

"Institutional controls" shall mean non-engineered instruments, such as administrative and/or legal controls, that help to minimize the potential for human exposure to contamination and/or protect the integrity of a remedy by limiting land and/or resource use. Examples of institutional controls include easements and covenants, zoning restrictions, special building permit requirements, and well drilling prohibitions.

"Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

"MSW" shall mean Municipal Solid Waste that is waste material: (a) generated by a household (including a single or multifamily residence); or (b) generated by a commercial, industrial, or institutional entity, to the extent that the waste material (1) is essentially the same as waste normally generated by a household; (2) is collected and disposed of with other municipal solid waste as part of normal municipal solid waste collection services; and (3) contains a relative quantity of hazardous substances no greater than the relative quantity of hazardous substances contained in waste material generated by a typical single-family household.

"NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

"NJDEP" shall mean the New Jersey Department of Environmental Protection and any successor departments or agencies of the State.

"Operable Unit 2" shall mean response actions conducted on the Troy Chemical Corporation, Inc. property located at One Avenue L, Newark, New Jersey, as generally depicted on a map in Appendix B.

"Paragraph" shall mean a portion of this Settlement Agreement identified by an Arabic numeral or an upper or lower case letter.

"Parties" shall mean EPA and Respondent.

"Property" shall mean the Troy Chemical Corporation, Inc. property located at One Avenue L, Newark, Essex County, New Jersey, including surface, subsurface and groundwater. The Property is situated within the Pierson's Creek Superfund Site.

"RCRA" shall mean the Resource Conservation and Recovery Act, also known as the Solid Waste Disposal Act, 42 U.S.C. §§ 6901-6992.

"Respondent" shall mean Troy Chemical Corporation, Inc.

"Section" shall mean a portion of this Settlement Agreement identified by a Roman numeral.

"Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent, the SOW, all appendices attached hereto (listed in Section XXVII) and all documents incorporated by reference into this document including without limitation EPA-approved submissions. EPA-approved submissions (other than progress reports) are incorporated into and become a part of the Settlement Agreement upon approval by EPA. In the event of conflict between this Settlement Agreement and any appendix or other incorporated documents, this Settlement Agreement shall control.

"Site" shall mean the Pierson's Creek Superfund Site, located in Newark, Essex County, New Jersey and generally depicted on a map in Appendix B.

"Pierson's Creek Superfund Site Special Account" shall mean the special account, within the EPA Hazardous Substance Superfund, established for the Site by EPA pursuant to Section 122(b)(3) of CERCLA, 42 U.S.C. § 9622(b)(3).

"State" shall mean the State of New Jersey.

"SOW" shall mean the Statement of Work for development of a RI/FS for Respondent's Property within the Pierson's Creek Superfund Site, OU 02, as set forth in Appendix A to this Settlement Agreement. The SOW is the principal document governing Work under this Settlement Agreement. It is incorporated into this Settlement Agreement and is an enforceable part of this Settlement Agreement as are any modifications made thereto in accordance with this Settlement Agreement.

"United States" shall mean the United States of America and each department, agency, and instrumentality of the United States, including EPA.

"Waste Material" shall mean, with respect to Work performed under this Settlement Agreement, (a) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (b) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (c) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and (d) any mixture containing any of the constituents noted in (a), (b) or (c), above.

"Work" shall mean all activities Respondent is required to perform under this Settlement Agreement and SOW, except those required by Section XIV (Retention of Records).

V. EPA'S FINDINGS OF FACT

11. Currently, Pierson's Creek begins south of the Property where it receives stormwater runoff from a large culvert. The Creek continues to flow through a series of open channels and culverts in a general south-southwesterly direction before discharging into the Port Newark Channel of Newark Bay.

12. The manufacturing plant ("Plant") located on the Property manufactured mercury compounds from approximately 1956 until approximately 1980. Manufacturing processes included purification of mercury, production of mercuric oxide from mercury and the manufacture of organic mercury compounds using mercuric oxide.

13. The mercuric oxide manufacturing process at the Plant was reported to be the primary source of mercury-bearing wastewater at the Plant, accounting for approximately 7,000 gallons per week. Other sources of mercury-bearing wastewater included spillage, leakage, and washing of equipment and floors of the mercury production areas of the Plant.

14. The Plant discharged its mercury-bearing wastewater directly into Pierson's Creek without any treatment until 1965. Sulfide precipitation pretreatment was used from 1965 until 1976. In 1976, the Plant was connected to the Passaic Valley Sewerage Commission ("PVSC") sewer system and began diverting wastewater from the mercury pretreatment system to an overall wastewater treatment plant where wastewaters were treated by settling, removal of suspended solids and oil, and neutralization before subsequent discharge to the PVSC system.

15. There were reported instances of mercury-containing wastewater and stormwater discharges from the Plant into Pierson's Creek after the Plant's connection to the PVSC sewer system. An NJDEP inspection in July 1977 revealed numerous pipes discharging into the Creek, none of which were depicted on the site plan for the facility. During an April 28, 1980 inspection, NJDEP observed stormwater and wastewater flowing into the Creek and its unnamed tributary via runoff, pipes, cracks in the Creek's concrete walls adjacent to a building at the Plant and tank farm, and overflow from the Plant's industrial wastewater collection sump. All of these discharges were found to contain mercury.

16. In July 1979, EPA collected a sediment sample from the Creek just downstream of the Plant's mercury wastewater treatment system and reported a mercury concentration of 22,400 milligrams per kilogram ("mg/kg") compared to upstream concentrations of 140 and 191 mg/kg. EPA also reported mercury concentrations above background for samples collected downstream of the Plant. A 2010 investigation indicated significant increases in sediment mercury concentrations at and downstream of the Plant compared to upstream sediment concentrations.

17. By letter dated August 9, 2011, NJDEP nominated Pierson's Creek for inclusion on the National Priorities List ("NPL").

18. EPA conducted an investigation of Pierson's Creek in October 2012 that confirmed the observed release of mercury to the Creek sediments. Mercury was detected in sediment samples collected throughout the accessible portions of the Creek and a Site-attributable observed release is documented for a distance of approximately 0.25 miles downstream of the Plant.

19. The Site was listed on the NPL pursuant to CERCLA Section 105, 42 U.S.C. § 9605, on September 22, 2014, 79 FR 56515.

20. The Respondent is a corporation located at One Avenue L in Newark, New Jersey. The Respondent is the current owner or operator under CERCLA Section 107(a) of Property located within the Site.

VI. EPA'S CONCLUSIONS OF LAW AND DETERMINATIONS

Based on the Findings of Fact set forth in Section V, EPA has determined that:

21. The Plant is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

22. The contamination found at the Property, as identified in the Findings of Fact above, includes "hazardous substances" as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14) or constitutes "any pollutant or contaminant" that may present an imminent and substantial danger to public health or welfare under Section 104(a)(1) of CERCLA.

23. The conditions described in the Findings of Fact in Section V above constitute an actual and/or threatened "release" of a hazardous substance from the facility as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

24. Respondent is a "person" as defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

a. Respondent is a responsible party under Sections 104, 107, and 122 of CERCLA, 42 U.S.C. §§ 9604, 9607 and 9622. Respondent is the "owner" and/or "operator" of the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1).

25. The actions required by this Settlement Agreement are necessary to protect the public health, welfare, or the environment, are in the public interest, 42 U.S.C. § 9622(a), are consistent with CERCLA and the NCP, 42 U.S.C. §§ 9604(a)(1), 9622(a), and will expedite effective remedial action and minimize litigation, 42 U.S.C. § 9622(a).

26. EPA has determined that Respondent is qualified to conduct the RI/FS within the meaning of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), and will carry out the Work properly and promptly, in accordance with Sections 104(a) and 122(a) of CERCLA, 42 U.S.C. §§ 9604(a) and 9622(a), if Respondent complies with the terms of this Settlement Agreement.

VII. SETTLEMENT AGREEMENT AND ORDER

27. Based upon the foregoing Findings of Fact and Conclusions of Law and Determinations, it is hereby Ordered and Agreed that Respondent shall comply with all provisions of this Settlement Agreement, including, but not limited to, all appendices to this Settlement Agreement and all documents incorporated by reference into this Settlement Agreement.

VIII. DESIGNATION OF CONTRACTORS AND PROJECT COORDINATORS

28. Selection of Contractors, Personnel. All Work performed under this Settlement Agreement shall be under the direction and supervision of qualified personnel. Respondent has selected and EPA has approved Geosyntec Consultants as the contractor to be used in carrying out the Work. Respondent has demonstrated that the proposed contractor has a quality system

that complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995, or most recent version), by submitting a copy of the contractor's Quality Management Plan ("QMP"). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)," (EPA/240/B-01/002, March 2001; Reissued May 2006) or equivalent documentation as determined by EPA. The qualifications of the persons undertaking the Work for Respondent shall be subject to EPA's review, for verification that such persons meet minimum technical background and experience requirements. This Settlement Agreement is contingent on Respondent's demonstration to EPA's satisfaction that Respondent is qualified to perform properly and promptly the actions set forth in this Settlement Agreement. If EPA disapproves in writing of any person's technical qualifications, Respondent shall notify EPA of the identity and qualifications of the replacements within fifteen (15) days after the written notice. If EPA subsequently disapproves of the replacement, EPA reserves the right to terminate this Settlement Agreement and to conduct a complete RI/FS, and to seek reimbursement for costs and penalties from Respondent. During the course of the RI/FS, Respondent shall notify EPA in writing of any changes or additions in the personnel used to carry out such Work, providing their names, titles, and qualifications. EPA shall have the same right to disapprove changes and additions to personnel as it has hereunder regarding the initial notification.

29. Respondent has designated and EPA has approved Chris Greene, P.E., a Senior Principal at Geosyntec Consultants as the Project Coordinator who shall be responsible for administration of all actions by Respondent required by this Settlement Agreement. Respondent has submitted to EPA the designated Project Coordinator's address, telephone number, and qualifications. If EPA disapproves of the designated Project Coordinator, Respondent shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number, and qualifications within fourteen (14) days following EPA's disapproval. To the greatest extent possible, the Project Coordinator shall be present on the Property or readily available during Work on the Property. EPA retains the right to disapprove of the designated Project Coordinator. Respondent shall have the right to change their Project Coordinator, subject to EPA's right to disapprove. Respondent shall notify EPA fifteen (15) days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notification. Receipt by Respondent' Project Coordinator of any notice or communication from EPA relating to this Settlement Agreement shall constitute receipt by Respondent.

30. EPA has designated Pamela Tames, P.E., of the New York Remediation Branch, Region 2 as its Remedial Project Manager ("RPM"). EPA will notify Respondent of a change of its designated RPM. Except as otherwise provided in this Settlement Agreement, Respondent shall direct all submissions required by this Settlement Agreement electronically, unless otherwise directed, to the RPM at tames.pam@epa.gov.

31. EPA's RPM shall have the authority lawfully vested in a RPM by the NCP. In addition, EPA's RPM shall have the authority consistent with the NCP, to halt any Work required

by this Settlement Agreement, and to take any necessary response action when she determines that conditions at the Site may present an immediate endangerment to public health or welfare or the environment. The absence of the EPA RPM from the area under study pursuant to this Settlement Agreement shall not be cause for the stoppage or delay of Work.

32. EPA has arranged for CDM Federal Programs Corporation to assist in its oversight and review of the conduct of the RI/FS, as required by Section 104(a) of CERCLA, 42 U.S.C. § 9604(a). CDM shall have the authority to observe the Work and make inquiries in the absence of EPA, but not to modify the RI/FS Work Plan.

IX. WORK TO BE PERFORMED

33. Respondent shall conduct the Work in accordance with the provisions of this Settlement Agreement, the SOW, CERCLA, the NCP, and EPA guidance, including, but not limited to the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" ("RI/FS Guidance") (OSWER Directive # 9355.3-01, October 1988 and any other public written guidance that EPA uses in conducting an RI/FS as appropriate and consistent with the SOW, as may be amended or modified by EPA. The RI shall characterize Property conditions, determine the nature and extent of the contamination, assess risk to human health and the environment, and conduct treatability testing, as necessary, to evaluate the potential performance and cost of the treatment technologies that are being considered. The FS shall identify and evaluate (based on treatability testing, where appropriate) alternatives for remedial action to prevent, mitigate, or otherwise respond to or remedy the release or threatened release of hazardous substances, pollutants, or contaminants at or from the Property. The alternatives evaluated must include, but shall not be limited to, the range of alternatives described in the NCP, and shall include remedial actions that utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. In evaluating the alternatives, Respondent shall address the factors required to be taken into account by Section 121 of CERCLA, 42 U.S.C. § 9621, and Section 300.430(e) of the NCP, 40 C.F.R. § 300.430(e).

34. Respondent shall submit all deliverables to EPA in electronic form. If any deliverable includes maps, drawings, or other exhibits that are larger than 8.5" by 11", Respondent shall also provide EPA with paper copies of such exhibits, unless directed otherwise by EPA.

35. Technical Specifications for Deliverables. Sampling and monitoring data will be submitted in standard regional Electronic Data Deliverable format. Other delivery methods may be allowed if electronic direct submission presents a significant burden or as technology changes.

36. Spatial data, including spatially-referenced data and geospatial data, should be submitted: (1) in the ESRI File Geodatabase format; and (2) as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (NAD83) or World Geodetic System 1984 (WGS84) as the datum. If applicable, submissions should include the

collection method(s). Projected coordinates may optionally be included but must be documented. Spatial data should be accompanied by metadata, and such metadata should be compliant with the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata Editor (EME), complies with these FGDC and EPA metadata requirements and is available at https://edg.epa.gov/EME/.

37. Each file must include an attribute name for each site unit or sub-unit submitted. Consult http://www.epa.gov/geospatial/geospatial-policies-and-standards.html for any further available guidance on attribute identification and naming.

38. Spatial data submitted by Respondent does not, and is not intended to, define the boundaries of OU2.

39. Upon receipt of the draft FS report, EPA will evaluate, as necessary, the report's estimates of the risk to the public and environment that are expected to remain after a particular remedial alternative has been completed and will evaluate the durability, reliability, and effectiveness of any proposed Institutional Controls.

40. Modification of the RI/FS Work Plan.

a. The SOW contemplates Respondent preparing an RI/FS based in large part upon work already performed with some additional sampling reflected in an RI/FS Work Plan. If at any time during the RI/FS process, Respondent identifies a need for additional data, Respondent shall submit a memorandum documenting the need for additional data to the EPA RPM within thirty (30) days after identification. EPA in its discretion will determine whether the additional data will be collected by Respondent and whether it will be incorporated into plans, reports, and other deliverables.

b. In the event of unanticipated or changed circumstances affecting the Work at the Property, Respondent shall notify the EPA RPM by telephone within 24 hours of discovery of the unanticipated or changed circumstances. In the event that EPA determines that the unanticipated or changed circumstances warrant changes to the RI/FS Work Plan, EPA shall modify or amend the RI/FS Work Plan in writing accordingly. Respondent shall perform the RI/FS Work Plan as modified or amended.

c. EPA may determine that in addition to tasks defined in the initially approved RI/FS Work Plan, other additional Work may be necessary to accomplish the objectives of the RI/FS. Respondent agrees to perform these response actions in addition to those required by the initially approved RI/FS Work Plan, including any approved modifications, if EPA determines that such actions are necessary for a complete RI/FS.

d. Respondent shall confirm its willingness to perform the additional Work in writing to EPA within seven (7) days after receipt of the EPA request. If Respondent objects to any modification determined by EPA to be necessary pursuant to this Paragraph, Respondent

may seek dispute resolution pursuant to Section XV (Dispute Resolution). The SOW and/or RI/FS Work Plan shall be modified in accordance with the final resolution of the dispute.

e. Respondent shall complete the additional Work according to the standards, specifications, and schedule set forth or approved by EPA in a written modification to the RI/FS Work Plan. EPA reserves the right to conduct the Work itself at any point, to seek reimbursement from Respondent, and/or to seek any other appropriate relief.

f. Nothing in this Paragraph shall be construed to limit EPA's authority to require performance of further response actions at the Property.

41. Off-Site Shipment.

a. Respondent may ship hazardous substances, pollutants and contaminants generated as a result of the Work to an off-site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondent will be deemed to be in compliance with CERCLA Section 121(d)(3) and 40 C.F.R. § 300.440 regarding a shipment if Respondent obtains a prior determination from EPA that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b). Respondent may ship Investigation Derived Waste (IDW) from the Property to an off-site facility only if Respondent complies with EPA's "Guide to Management of Investigation Derived Waste," OSWER 9345.3-03FS (Jan. 1992).

b. Respondent may ship Waste Material generated as a result of the Work to an out-of-state waste management facility only if, prior to any shipment, they provide written notice to the appropriate state environmental official in the receiving facility's state and to the EPA RPM. This written notice requirement shall not apply to any off-site shipments when the total quantity of all such shipments will not exceed ten cubic yards. The written notice must include the following information, if available: (1) the name and location of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. Respondent also shall notify the state environmental official referenced above and the EPA RPM of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. Respondent shall provide the written notice after the award of the contract for remedial investigation and feasibility study and before the Waste Material is shipped.

42. Meetings. Respondent shall make presentations at, and participate in, meetings at the request of EPA during the initiation, conduct, and completion of the RI/FS. In addition to discussion of the technical aspects of the RI/FS, topics will include anticipated problems or new issues. Meetings will be scheduled at EPA's discretion.

43. Progress Reports. In addition to the plans, reports, and other deliverables set forth in this Settlement Agreement, Respondent shall provide to EPA monthly progress reports by the 15th day of the following month. At a minimum, with respect to the preceding month, these

progress reports shall (a) describe the actions that have been taken to comply with this Settlement Agreement during that month, (b) include all results of sampling and tests and all other data received by Respondent, (c) describe Work planned for the next two months with schedules relating such Work to the overall project schedule for RI/FS completion, and (d) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

44. Emergency Response and Notification of Releases.

a. In the event of any action or occurrence during arising from or relating to performance of the Work that causes or threatens a release of Waste Material from the Property that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondent shall immediately take all appropriate action. Respondent shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondent shall also immediately notify the Emergency Spill Reporting Hotline at (732) 548-8730 and the EPA RPM or, in the event of her unavailability, the Chief of the Passaic, Hackensack and Newark Bay Remediation Branch at (212) 637-4310 of the incident or Property conditions. In the event that Respondent fails to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Respondent shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XVIII (Payment of Response Costs).

b. In addition, in the event of any release of a hazardous substance from the Property, Respondent shall immediately notify the EPA RPM, and the National Response Center at (800) 424-8802. Respondent shall submit a written report to EPA within seven (7) days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, *et seq.*

X. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS

45. After review of any plan, report, or other item that is required to be submitted for approval pursuant to this Settlement Agreement, in a notice to Respondent EPA shall: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that Respondent modify the submission; or (e) any combination of the above. However, EPA shall not modify a submission without first providing Respondent at least one notice of deficiency and an opportunity to cure within thirty (30) days, except where to

do so would cause serious disruption to the Work or where previous submission(s) have been disapproved due to material defects.

46. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Paragraph 457.a, 457.b, 457.c, or 457.d, Respondent shall proceed to take any action required by the plan, report, or other deliverable, as approved or modified by EPA subject only to their right to invoke the Dispute Resolution procedures set forth in Section XV (Dispute Resolution) with respect to the modifications or conditions made by EPA. Following EPA approval or modification of a submission or portion thereof, Respondent shall not thereafter alter or amend such submission or portion thereof unless directed by EPA. In the event that EPA modifies the submission to cure the deficiencies pursuant to Paragraph 457.c and the submission had a material defect, EPA retains the right to seek stipulated penalties, as provided in Section XVI (Stipulated Penalties).

47. Resubmission.

a. Upon receipt of a notice of disapproval, Respondent shall, as specified in the SOW or if not specified within thirty (30) days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or other deliverable for approval. Any stipulated penalties applicable to the submission, as provided in Section XVI, shall accrue during the period specified in the SOW or otherwise specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraphs 48 and 49, respectively.

b. Notwithstanding the receipt of a notice of disapproval, Respondent shall proceed to take any action required by any non-deficient portion of the submission, unless otherwise directed by EPA. Implementation of any non-deficient portion of a submission shall not relieve Respondent of any liability for stipulated penalties under Section XVI (Stipulated Penalties).

c. Respondent shall not proceed with any activities or tasks dependent on the following deliverables until receiving EPA approval, approval on condition, or modification of such deliverables: RI/FS Work Plan and Sampling and Analysis Plan, Health and Safety Plan (HASP), Quality Assurance Project Plan (QAPP), Draft Remedial Investigation Report, Draft Feasibility Study Report, and if determined that additional Treatability Testing is required, the Treatability Testing Work Plan, Treatability Testing Sampling and Analysis Plan, Treatability Testing HASP, and the Treatability Testing QAPP. While awaiting EPA approval, approval on condition, or modification of these deliverables, Respondent shall proceed with all other tasks and activities that may be conducted independently of these deliverables, in accordance with the SOW.

d. For all remaining deliverables not listed above in Paragraph 47.c, Respondent shall proceed will all subsequent tasks, activities, and deliverables, required by the SOW, without awaiting EPA approval on the submitted deliverable. EPA reserves the right to

stop Respondent from proceeding further, either temporarily or permanently, on any task, activity or deliverable at any point during the RI/FS.

48. If EPA disapproves a resubmitted plan, report, or other deliverable, or portion thereof, EPA may again direct Respondent to correct the deficiencies. EPA shall also retain the right to modify or develop the plan, report, or other deliverable. Respondent shall implement any such plan, report, or deliverable as corrected, modified, or developed by EPA, subject only to Respondent' right to invoke the procedures set forth in Section XV (Dispute Resolution).

49. If upon resubmission, a plan, report, or other deliverable is disapproved or modified by EPA due to a material defect, Respondent shall be deemed to have failed to submit such plan, report, or other deliverable timely and adequately unless Respondent invoke the dispute resolution procedures in accordance with Section XV (Dispute Resolution) and EPA's action is revoked or substantially modified pursuant to a Dispute Resolution decision issued by EPA or superseded by an agreement reached pursuant to that Section. The provisions of Section XV (Dispute Resolution) and Section XVI (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If EPA's disapproval or modification is not otherwise revoked, substantially modified, or superseded as a result of a decision or agreement reached pursuant to the Dispute Resolution process set forth in Section XV, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XVI.

50. In the event that EPA takes over some of the tasks, but not the preparation of the RI Report or the FS Report, Respondent shall incorporate and integrate information supplied by EPA into the final reports.

51. All plans, reports, and other deliverables submitted to EPA under this Settlement Agreement or the SOW shall, upon approval or modification by EPA, be incorporated into and enforceable under this Settlement Agreement. In the event EPA approves or modifies a portion of a plan, report, or other deliverable submitted to EPA under this Settlement Agreement, the approved or modified portion shall be incorporated into and enforceable under this Settlement Agreement.

52. Neither failure of EPA to expressly approve or disapprove of Respondent's submissions within a specified time period, nor the absence of comments, shall be construed as approval or disapproval by EPA. Whether or not EPA gives express approval for Respondent's deliverables, Respondent is responsible for preparing deliverables acceptable to EPA.

XI. QUALITY ASSURANCE, SAMPLING, AND ACCESS TO INFORMATION

53. Quality Assurance. Respondent shall assure that Work performed, samples taken, and analyses conducted conform to the requirements of the SOW, the QAPP, and guidance identified therein. Respondent will assure that field personnel used by Respondent are properly

trained in the use of field equipment and in chain of custody procedures. Respondent shall only use laboratories that have a documented quality system that complies with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001; Reissued May 2006) or equivalent documentation as determined by EPA.

54. Sampling.

a. All results of sampling, tests, modeling, or other data (including raw data) generated by Respondent, or on Respondent's behalf, during the period that this Settlement Agreement is effective, shall be submitted to EPA in the next monthly progress report as described in Paragraph 43. EPA will make available to Respondent validated data generated by EPA unless it is exempt from disclosure by any federal or state law or regulation.

b. Respondent shall verbally notify EPA at least fourteen (14) days prior to conducting significant field events as described in the SOW, RI/FS Work Plan, or Sampling and Analysis Plan. At EPA's verbal or written request, or the request of EPA's oversight assistant, Respondent shall allow split or duplicate samples to be taken by EPA (and its authorized representatives) of any samples collected in implementing this Settlement Agreement. All split samples of Respondent shall be analyzed by the methods identified in the QAPP.

55. Access to Information.

a. Respondent shall provide to EPA upon request, copies of all records, reports, documents, and other information (including records, reports, documents, and other information in electronic form) (hereinafter referred to as "Records") within its possession or control or that of its contractors or agents relating to activities to implement the SOW at the Property or to the implementation of this Settlement Agreement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Respondent shall also make available to EPA, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

b. Respondent may assert business confidentiality claims covering part or all of the Records submitted to EPA under this Settlement Agreement, and/or covering information disclosed to EPA during EPA's presence on the Property, such as manufacturing or formulation processes, raw materials, production, volumes and inventory ("Property Information"), to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b).Records and/or Property Information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies Records when they are submitted to EPA, or when the Property Information is disclosed to EPA, or if EPA has notified Respondent that the Records and/or Property Information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such Records

without further notice to Respondent. Respondent shall segregate and clearly identify all Records submitted under this Settlement Agreement, and shall clearly inform EPA when Property Information is disclosed to EPA, for which Respondent asserts business confidentiality claims. If EPA or its Representatives are legally compelled by subpoena or similar process, including a request for information pursuant to the Freedom of Information Act, to disclose any confidential Records or Property Information, EPA will provide Respondent with prompt prior notice so that Respondent may have a reasonable opportunity to seek a protective order or other appropriate remedy to protect the confidential Records or Property Information from disclosure. If the subpoena or similar process is not quashed or a protective order is not obtained, the confidential Records or Property Information disclosed in response to such subpoena or similar process shall be limited to that information which is legally required to be disclosed in such response.

c. Respondent may assert that certain Records are privileged under the attorney-client privilege or any other privilege recognized by federal law. If the Respondent asserts such a privilege in lieu of providing Records, it shall provide EPA with the following: (i) the title of the Record; (ii) the date of the Record; (iii) the name, title, affiliation (e.g., company or firm), and address of the author of the Record; (iv) the name and title of each addressee and recipient; (v) a description of the contents of the Record; and (vi) the privilege asserted by Respondent. However, no Records created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged or confidential.

d. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other Records evidencing conditions related to the Work at or around the Property.

56. In entering into this Settlement Agreement, Respondent waives any objections to any data gathered, generated, or evaluated by EPA, the State or Respondent in the performance or oversight of the Work that has been verified according to the quality assurance/quality control ("QA/QC") procedures required by the Settlement Agreement or any EPA-approved RI/FS Work Plans or Sampling and Analysis Plans. If Respondent objects to any other data relating to the RI/FS, Respondent shall submit to EPA a report that specifically identifies and explains its objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to EPA within fifteen (15) days after the monthly progress report containing the data.

XII. PROPERTY ACCESS AND INSTITUTIONAL CONTROLS

57. Commencing on the Effective Date, Respondent shall provide EPA, and its representatives, including contractors, with access at all reasonable times to the Property, for the purpose of conducting any activity related to this Settlement Agreement. EPA and its representatives are aware that the Property is an operating chemical plant.

58. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than Respondent, Respondent shall use their best efforts to obtain all necessary access agreements within sixty (60) days after the Effective Date, or as otherwise specified in writing by the EPA RPM. Respondent shall immediately notify EPA if after using its best efforts it is unable to obtain such agreements. For purposes of this Paragraph, "best efforts" includes the payment of reasonable sums of money in consideration of access. Respondent shall describe in writing its efforts to obtain access. If Respondent cannot obtain access agreements, EPA may either (a) obtain access for Respondent or assist Respondent in gaining access, to the extent necessary to effectuate the response actions described in this Settlement Agreement, using such means as EPA deems appropriate; (b) perform those tasks or activities with EPA contractors; or (c) terminate the Settlement Agreement. Respondent shall reimburse EPA for all costs and attorney's fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XVIII (Payment of Response Costs). If EPA performs those tasks or activities with EPA contractors and does not terminate the Settlement Agreement, Respondent shall perform all other tasks or activities not requiring access to that property, and shall reimburse EPA for all costs incurred in performing such tasks or activities. Respondent shall integrate the results of any such tasks or activities undertaken by EPA into its plans, reports, and other deliverables.

59. Notwithstanding any provision of this Settlement Agreement, EPA retains all of its access authorities and rights as well as all of its rights to require land/water use restrictions], including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

XIII. COMPLIANCE WITH OTHER LAWS

60. Respondent shall comply with all applicable state and federal laws and regulations when performing the RI/FS. No local, state, or federal permit shall be required for any portion of any action conducted entirely on OU2, including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work is to be conducted off-Site and requires a federal or state permit or approval, Respondent shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals. This Settlement Agreement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

XIV. RETENTION OF RECORDS

61. During the pendency of this Settlement Agreement and for a minimum of ten (10) years after commencement of construction of any remedial action, Respondent shall preserve and retain all non-identical copies of Records (including Records in electronic form) now in its possession or control or that come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Property, regardless of any corporate retention policy to the contrary. Until ten (10) years after commencement of construction of any remedial action, Respondent shall also instruct its

contractors and agents to preserve all Records of whatever kind, nature, or description relating to performance of the Work.

62. At the conclusion of this document retention period, Respondent shall notify EPA at least ninety (90) days prior to the destruction of any such Records, and, upon request by EPA, Respondent shall deliver any such Records to EPA. Respondent may assert that certain Records are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege, it shall provide EPA with the following: (a) the title of the Record; (b) the date of the Record; (c) the name and title of the author of the Record; (d) the name and title of each addressee and recipient; (d) a description of the subject of the Record; and (f) the privilege asserted by Respondent. However, no Records created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged or confidential.

63. Respondent hereby certifies that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed, or otherwise disposed of any Records (other than identical copies) relating to its potential liability regarding the Site since the earlier of notification of potential liability by EPA or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information regarding the Site pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

XV. DISPUTE RESOLUTION

64. Unless otherwise expressly provided for in this Settlement Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement Agreement. The Parties shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally.

65. If Respondent objects to any EPA action taken pursuant to this Settlement Agreement, including billings for Future Response Costs, they shall notify EPA in writing of its objection(s) within twenty-one (21) days after such action, unless the objection(s) has/have been resolved informally. EPA and Respondent shall have thirty (30) days from EPA's receipt of Respondent's written objection(s) to resolve the dispute (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA. Such extension may be granted orally but must be confirmed in writing.

66. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Settlement Agreement. If the Parties are unable to reach an agreement within the Negotiation Period, an EPA management official at the Deputy Director of the Emergency and Remedial Response Division level or higher will issue a written decision. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement. Respondent's obligations under this Settlement Agreement shall not be tolled by submission of

any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs, and regardless of whether Respondent agrees with the decision.

XVI. STIPULATED PENALTIES

67. Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 68 and 69 for failure to comply with any of the requirements of this Settlement Agreement specified below unless excused under Section XVII (Force Majeure). "Compliance" by Respondent shall include completion of the Work under this Settlement Agreement or any activities contemplated under any RI/FS Work Plan or other plan approved under this Settlement Agreement identified below, in accordance with all applicable requirements of law, this Settlement Agreement, the SOW, and any plans or other documents approved by EPA pursuant to this Settlement Agreement and within the specified time schedules established by and approved under this Settlement Agreement. Any time schedule or deadline established within this Settlement Agreement or the SOW may be extended by mutual agreement of the Parties.

68. Stipulated Penalty Amounts – Major Deliverables, Payments, establishment or maintenance of Financial Assurance, and Other Requirements

Penalty per Violation per Day	Period of Noncompliance
$ 1,000	1st through 14th day
$ 1,500	15th through 30th day
$ 5,000	31st day and beyond

69. Stipulated Penalty Amounts – Other Reports and Documents

a. The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate deliverables, pursuant to Section X of this Settlement Agreement:

Penalty per Violation per Day	Period of Noncompliance
$ 500	1st through 14th day
$ 1,000	15th through 30th day
$ 2,500	31st day and beyond

70. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 88 (Work Takeover), Respondent shall be liable for a stipulated penalty in the amount of $250,000.

71. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: (a) with respect to a deficient submission under Section X (EPA Approval of Plans and Other Submissions), during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Respondent of any deficiency; and (b) with respect to a decision by the EPA management official designated in Paragraph 66 of Section XV (Dispute Resolution), during the period, if any, beginning on the 21st day after the Negotiation Period begins until the date that the EPA management official issues a final decision regarding such dispute. Nothing in this Settlement Agreement shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.

72. Following EPA's determination that Respondent has failed to comply with a requirement of this Settlement Agreement, EPA may give Respondent written notification of the same and describe the noncompliance. EPA may send Respondent a written demand for the payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified Respondent of a violation.

73. All penalties accruing under this Section shall be due and payable to EPA within thirty (30) days after Respondent's receipt from EPA of a demand for payment of the penalties, unless Respondent invokes the dispute resolution procedures under Section XV (Dispute Resolution). Respondent shall make all payments required by this Paragraph to EPA by Fedwire Electronic Funds Transfer to:

Federal Reserve Bank of New York
ABA = 021030004
Account = 68010727
SWIFT address = FRNYUS33
33 Liberty Street
New York NY 10045
Field Tag 4200 of the Fedwire message should read "D 68010727 Environmental Protection Agency"

and shall reference stipulated penalties, Site/Spill ID Number 02MV, and the EPA docket number for this action.

74. At the time of payment required to be made in accordance with Paragraph 73, Respondent shall send notice by email that payment has been made to the EPA RPM and to the EPA Cincinnati Finance Office at cinwd_acctsreceivable@epa.gov and to

mcguffy.elizabeth@epa.gov and provide reference to the EPA docket number for this action and the Site/Spill ID Number, 02MV.

75. The payment of penalties shall not alter in any way Respondent's obligation to complete performance of the Work required under this Settlement Agreement

76. Penalties shall continue to accrue as provided in Paragraph 71 during any dispute resolution period, but need not be paid until fifteen (15) days after the dispute is resolved by agreement or by receipt of EPA's decision.

77. If Respondent fails to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties, as well as Interest. Respondent shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 73.

78. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondent's violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(*l*) of CERCLA, 42 U.S.C. § 9622(*l*), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that EPA shall not seek civil penalties pursuant to Section 122(*l*) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided in this Settlement Agreement, except in the case of willful violation of this Settlement Agreement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Section XX (Reservation of Rights by EPA), Paragraph 88. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

XVII. FORCE MAJEURE

79. Respondent agrees to perform all requirements of this Settlement Agreement within the time limits established under this Settlement Agreement, unless the performance is delayed by a *force majeure*. For purposes of this Settlement Agreement, *force majeure* is defined as any event arising from causes beyond the control of Respondent or of any entity controlled by Respondent, including but not limited to its contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement despite Respondent's best efforts to fulfill the obligation. *Force majeure* does not include financial inability to complete the Work or increased cost of performance.

80. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a *force majeure* event, Respondent shall notify EPA orally within five (5) days of when Respondent first knew that the event might cause a delay. Within seven (7) days thereafter, Respondent shall provide to EPA in

writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondent's rationale for attributing such delay to a *force majeure* event if it intends to assert such a claim; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health, welfare, or the environment. Failure to comply with the above requirements shall preclude Respondent from asserting any claim of *force majeure* for that event for the period of time of such failure to comply and for any additional delay caused by such failure.

81. If EPA agrees that the delay or anticipated delay is attributable to a *force majeure* event, the time for performance of the obligations under this Settlement Agreement that are affected by the *force majeure* event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the *force majeure* event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a *force majeure* event, EPA will notify Respondent in writing of its decision. If EPA agrees that the delay is attributable to a *force majeure* event, EPA will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the *force majeure* event.

XVIII. PAYMENT OF RESPONSE COSTS

82. Payments of Future Response Costs.

a. Respondent shall pay EPA all Future Response Costs for OU 2 not inconsistent with the NCP. On a periodic basis, EPA will send Respondent a bill requiring payment that includes a Superfund Cost Recovery Package Imaging and On-line system ("SCORPIOS") Report, which includes direct and indirect costs incurred by EPA, its contractors, and DOJ. Respondent shall make all payments within thirty (30) days after receipt of each bill requiring payment. Respondent and EPA agree that a letter from a branch chief within the Emergency and Remedial Response Division, EPA Region 2, providing the amount of costs incurred and accompanied by a SCORPIOS Report shall serve as the sole basis for payment demands by EPA. Respondent shall not demand any additional documentation beyond that specified in this subparagraph as a prerequisite for making any payments demanded by EPA for Future Response Costs. Payments shall be made to EPA by Fedwire Electronic Funds Transfer ("EFT") to:

Federal Reserve Bank of New York
ABA = 021030004
Account = 68010727
SWIFT address = FRNYUS33
33 Liberty Street
New York NY 10045

Field Tag 4200 of the Fedwire message should read "D 68010727 Environmental Protection Agency"

and shall reference Site/Spill ID Number 02MV and the EPA docket number for this action.

b. At the time of payment, Respondent shall send notice that payment has been made to the EPA RPM, and to the EPA Cincinnati Finance Center by email at cinwd_acctsreceivable@epa.gov and to mcguffey.elizabeth@epa.gov. Such notice shall reference Site/Spill ID Number 02MV and the EPA docket number for this action.

c. The total amount to be paid by Respondent pursuant to Paragraph 82.a. shall be deposited by EPA in the Pierson's Creek Superfund Site Special Account to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund, provided, however, that EPA may deposit a Future Response Costs payment directly into the EPA Hazardous Substance Superfund if, at the time the payment is received, EPA estimates that the Pierson's Creek Superfund Site Special Account balance is sufficient to address currently anticipated future response actions to be conducted or financed by EPA at or in connection with the Site. Any decision by EPA to deposit a Future Response Costs payment directly into the EPA Hazardous Substance Superfund for this reason shall not be subject to challenge by Respondent pursuant to the dispute resolution provisions of this Settlement or in any other forum.

83. Interest. If Respondent does not pay Future Response Costs within thirty (30) days after Respondent's receipt of a bill, Respondent shall pay Interest on the unpaid balance. The Interest on unpaid Future Response Costs shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment. If EPA receives a partial payment, Interest shall accrue on any unpaid balance. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondent's failure to make timely payments under this Section, including but not limited to, payments of stipulated penalties pursuant to Section XVI. Respondent shall make all payments required by this Paragraph in the manner described in Paragraph 82.a.

84. Respondent may contest payment of any Future Response Costs billed under Paragraph 82. if it determines that EPA has made a mathematical error or included a cost item that is not within the definition of Future Response Costs, or if it believes EPA incurred excess costs as a direct result of an EPA action that was inconsistent with a specific provision or provisions of the NCP. Such objection shall be made in writing within thirty (30) days after receipt of the bill and must be sent to the EPA RPM. Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, Respondent shall within the thirty (30) day period pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 82a. Simultaneously, Respondent shall establish, in a duly chartered bank or trust company, an interest-bearing escrow account that is insured by the Federal Deposit Insurance Corporation, and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondent shall send to the

EPA RPM a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, Respondent shall initiate the Dispute Resolution procedures in Section XV (Dispute Resolution). If EPA prevails in the dispute, within five (5) days after the resolution of the dispute, Respondent shall pay the sums due (with accrued interest) to EPA in the manner described in Paragraph 82. If Respondent prevails concerning any aspect of the contested costs, Respondent shall pay that portion of the costs (plus associated accrued interest) for which it did not prevail to EPA in the manner described in Paragraph 82. Respondent shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XV (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondent's obligation to reimburse EPA for its Future Response Costs.

XIX. COVENANT NOT TO SUE BY EPA

85. In consideration of the actions that will be performed and the payments that will be made by Respondent under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, EPA covenants not to sue or to take administrative action against Respondent pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work and Future Response Costs. This covenant not to sue shall take effect upon the Effective Date and is conditioned upon the complete and satisfactory performance by Respondent of all obligations under this Settlement Agreement, including, but not limited to, payment of Future Response Costs pursuant to Paragraph 82 (Payment of Future Response Costs). This covenant not to sue extends only to Respondent and does not extend to any other person.

XX. RESERVATIONS OF RIGHTS BY EPA

86. Except as specifically provided in this Settlement Agreement, nothing in this Settlement Agreement shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, or contaminants, or hazardous or solid waste on, at, or from the Property or the Site. Further, nothing in this Settlement Agreement shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.

87. The covenant not to sue set forth in Section XIX above does not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement

Agreement is without prejudice to, all rights against Respondent with respect to all other matters, including, but not limited to:

a. liability for failure by Respondent to meet a requirement of this Settlement Agreement;

b. liability for costs not included within the definition of Future Response Costs;

c. liability for performance of response action other than the Work;

d. criminal liability;

e. liability for violations of federal or state law that occur during or after implementation of the Work;

f. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;

g. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Property; and

h. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to OU 2 not paid as Future Response Costs under this Settlement Agreement.

88. Work Takeover. In the event EPA determines that Respondent has ceased implementation of any portion of the Work, is seriously or repeatedly deficient or late in its performance of the Work, or is implementing the Work in a manner that may cause an endangerment to human health or the environment, EPA may issue a written notice ("Work Takeover Notice") to Respondent. Any Work Takeover Notice issued by EPA will specify the grounds upon which such notice was issued and will provide Respondent a period of seven (7) days within which to remedy the circumstances giving rise to EPA's issuance of such notice. If, after expiration of the 7-day notice period, Respondent has not remedied to EPA's satisfaction the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice, EPA may at any time thereafter assume the performance of all or any portion of the Work as EPA deems necessary ("Work Takeover"). Respondent may invoke the procedures set forth in Section XV (Dispute Resolution) to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Costs incurred by EPA in performing the Work pursuant to this Paragraph shall be considered Future Response Costs that Respondent shall pay pursuant to Section XVIII (Payment of Response Costs). Notwithstanding any other provision of this Settlement Agreement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

XXI. COVENANT NOT TO SUE BY RESPONDENT

89. Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Future Response Costs, or this Settlement Agreement, including, but not limited to:

a. any direct or indirect claim for reimbursement from the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;

b. any claim arising out of the Work or arising out of the response actions for which the Future Response Costs have or will be incurred, including any claim under the United States Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, or at common law; or

c. any claim pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, Section 7002(a) of RCRA, 42 U.S.C. § 6972(a), or state law relating to the Work or payment of Future Response Costs.

90. Except as expressly provided in Paragraphs 93 (Claims Against De Micromis Parties), 95 (Claims Against De Minimis and Ability to Pay Parties), and 96 (Claims Against Municipal Solid Waste Generators and Transporters), these covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in Section XX (Reservations of Rights by EPA), other than in Paragraph 87.a. (liability for failure to meet a requirement of the Settlement Agreement) or 87.d. (criminal liability), but only to the extent that Respondent's claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

91. Respondent reserves, and this Settlement Agreement is without prejudice to, claims against the United States, subject to the provisions of Chapter 171 of Title 28 of the United States Code, and brought pursuant to any statute other than CERCLA or RCRA and for which the waiver of sovereign immunity is found in a statute other than CERCLA or RCRA, for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the United States, as that term is defined in 28 U.S.C. § 2671, while acting within the scope of his or her office or employment under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred. However, the foregoing shall not include any claim based on EPA's selection of response actions, or the oversight or approval of Respondent' plans, reports, other deliverables, or activities.

92. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

93. Claims Against De Micromis Parties. Respondent agrees not to assert any claims and to waive all claims or causes of action (including but not limited to claims or causes of action under Sections 107(a) or 113 of CERCLA that it may have for all matters relating to the Property against any person where the person's liability to Respondent with respect to the Property is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Property, or having accepted for transport for disposal or treatment of hazardous substances at the Property, if all or part of the disposal, treatment, or transport occurred before April 1, 2001, and the total amount of material containing hazardous substances contributed by such person to the Property was less than 110 gallons of liquid materials or 200 pounds of solid materials.

94. The waiver in Paragraph 93 shall not apply with respect to any defense, claim, or cause of action that Respondent may have against any person meeting the above criteria if such person asserts a claim or cause of action relating to the Property against Respondent. This waiver also shall not apply to any claim or cause of action against any person meeting the above criteria if EPA determines:

a. that such person has failed to comply with any EPA requests for information or administrative subpoenas issued pursuant to Section 104(e) or 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) or 9622(e), or Section 3007 of RCRA, or has impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Property, or has been convicted of a criminal violation for the conduct to which this waiver would apply and that conviction has not been vitiated on appeal or otherwise; or

b. that the materials containing hazardous substances contributed to the Property by such person have contributed significantly, or could contribute significantly, either individually or in the aggregate, to the cost of response action or natural resource restoration at the Property.

95. Claims Against De Minimis and Ability-to-Pay Parties. Respondent agrees not to assert any claims and to waive all claims or causes of action (including but not limited to claims or causes of action under Sections 107(a) or 113 of CERCLA) that they may have for response costs relating to the Property against any person that in the future enters into a final Section 122(g) de minimis settlement, or a final settlement based on limited ability-to-pay, with EPA with respect to the Property as of the Effective Date. This waiver shall not apply with respect to any defense, claim, or cause of action that Respondent may have against any person if such person asserts a claim or cause of action relating to the Property against Respondent.

96. Claims Against Municipal Solid Waste Generators and Transporters. Respondent agrees not to assert any claims and to waive all claims or causes of action (including but not limited to claims or causes of action under Sections 107(a) or 113 of CERCLA) that it may have for all matters relating to the Property against any person where the person's liability to Respondent with respect to the Property is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of Municipal Solid Waste ("MSW") at the Property, if the volume of MSW disposed, treated, or transported by such person to the Property did not exceed 0.2 percent of the total volume of waste at the Property.

97. The waiver in Paragraph 96 shall not apply with respect to any defense, claim, or cause of action that Respondent may have against any person meeting the above criteria if such person asserts a claim or cause of action relating to the Property against Respondent. This waiver also shall not apply to any claim or cause of action against any person meeting the above criteria if EPA determines that: (a) the MSW contributed significantly or could contribute significantly, either individually or in the aggregate, to the cost of the response action or natural resource restoration at the Property; (b) the person has failed to comply with any information request or administrative subpoena issued pursuant to Section 104(e) or 122(e) of CERCLA, 42 U.S.C. § 9604(e) or § 9622(e), or Section 3007 of RCRA, 42 U.S.C. § 6927; or (c) the person impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Property.

XXII. OTHER CLAIMS

98. By issuance of this Settlement Agreement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent.

99. Except as expressly provided in Paragraphs 933 (Claims Against De Micromis Parties), 95 (Claims Against De Minimis and Ability-to-Pay Parties), and 96 (Claims Against MSW Generators and Transporters), and Section XIX (Covenant Not to Sue by EPA), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against Respondent or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages, and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

100. No action or decision by EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XXIII. EFFECT OF SETTLEMENT/CONTRIBUTION

101. Except as provided in Paragraphs 93 (Claims Against De Micromis Parties), 95 (Claims Against De Minimis and Ability-to-Pay Parties), and 96 (Claims Against MSW

Generators and Transporters), nothing in this Settlement Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement Agreement. Except as provided in Section XXI (Covenant Not to Sue by Respondent), each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Property against any person not a Party hereto. Nothing in this Settlement Agreement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2). Nothing in this Settlement Agreement affects the pending matter entitled, *Troy Chemical Corporation v. EPA*, Case No. 14-1290 (D.C. Cir.).

102. The Parties agree that this Settlement Agreement constitutes an administrative settlement pursuant to which Respondent has, as of the Effective Date, resolved its liability to the United States within the meaning of Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), and is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, or as may be otherwise provided by law, for the "matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement Agreement are the Work and Future Response Costs.

103. The Parties further agree that this Settlement Agreement constitutes an administrative settlement pursuant to which Respondent has, as of the Effective Date, resolved its liability to the United States within the meaning of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B).

104. Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement Agreement, notify EPA in writing no later than sixty (60) days prior to the initiation of such suit or claim. Respondent also shall, with respect to any suit or claim brought against it for matters related to this Settlement Agreement, notify EPA in writing within ten (10) days after service of the complaint or claim upon it. In addition, Respondent shall notify EPA within ten (10) days after service or receipt of any Motion for Summary Judgment and within ten (10) days after receipt of any order from a court setting a case for trial, for matters related to this Settlement Agreement.

105. In any subsequent administrative or judicial proceeding initiated by EPA, or by the United States on behalf of EPA, for injunctive relief, recovery of response costs, or other relief relating to the Property, Respondent shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, *res judicata*, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of the covenant by EPA set forth in Section XIX.

106. Effective upon signature of this Settlement Agreement by Respondent, Respondent agrees that the time period commencing on the date of its signature and ending on the date EPA receives from such Respondent the payment(s) required by Section XVIII (Payment of Response Costs) and, if any, Section XVI (Stipulated Penalties) shall not be included in computing the running of any statute of limitations potentially applicable to any action brought by the United States related to the "matters addressed" as defined in Paragraph 102 and that, in any action brought by the United States related to the "matters addressed," Respondent will not assert, and may not maintain, any defense or claim based upon principles of statute of limitations, waiver, laches, estoppel, or other defense based on the passage of time during such period. If EPA gives notice to Respondent that it will not make this Settlement Agreement effective, the statute of limitations shall begin to run again commencing ninety (90) days after the date such notice is sent by EPA.

XXIV. INDEMNIFICATION

107. Respondent shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees, and representatives from any and all claims or causes of action arising from, or on account of negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors, and representatives in carrying out actions pursuant to this Settlement Agreement. In addition, Respondent agrees to pay the United States all costs incurred by the United States, including but not limited to attorneys' fees and other expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors, and any persons acting on its behalf or under its control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities pursuant to this Settlement Agreement. Neither Respondent nor any such contractor shall be considered an agent of the United States.

108. The United States shall give Respondent notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.

109. Respondent waives all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Property or the Site. In addition, Respondent shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Property or the Site.

XXV. INSURANCE

110. At least thirty (30) days prior to commencing any Work on the Property under this Settlement Agreement, Respondent shall secure, and shall maintain for the duration of this Settlement Agreement, commercial general liability insurance with limits of 5 million dollars, for any one occurrence, and automobile insurance with limits of 5 million dollars, combined single limit, naming the EPA as an additional insured with respect to all liability arising out of the activities performed by or on behalf of Respondent pursuant to this Settlement Agreement. Within the same period, Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. Respondent shall submit such certificates and copies of policies each year on the anniversary of the Effective Date. In addition, for the duration of the Settlement Agreement, Respondent shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondent in furtherance of this Settlement Agreement. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondent need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXVI. FINANCIAL ASSURANCE

111. Within thirty (30) days after the Effective Date, Respondent shall establish and maintain financial security for the benefit of EPA in the amount of $1,700,000 in one or more of the following forms, in order to secure the full and final completion of Work by Respondent:

a. a surety bond unconditionally guaranteeing payment and/or performance of the Work;

b. one or more irrevocable letters of credit, payable to or at the direction of EPA, issued by financial institution(s) acceptable in all respects to EPA equaling the total estimated cost of the Work;

c. a trust fund administered by a trustee acceptable in all respects to EPA;

d. a policy of insurance issued by an insurance carrier acceptable in all respects to EPA, which ensures the payment and/or performance of the Work;

e. a written guarantee to pay for or perform the Work provided by a related company of Respondent, or by one or more unrelated companies that have a substantial business relationship with Respondent, including a demonstration that any such guarantor company satisfies the financial test requirements of 40 C.F.R. Part 264.143(f); or

f. a demonstration of sufficient financial resources to pay for the Work made by Respondent, which shall consist of a demonstration that Respondent satisfies the requirements of 40 C.F.R. Part 264.143(f).

112. Any and all financial assurance instruments provided pursuant to this Section shall be in form and substance satisfactory to EPA, determined in EPA's sole discretion. In the event that EPA determines at any time that the financial assurances provided pursuant to this Section (including, without limitation, the instrument(s) evidencing such assurances) are inadequate, Respondent shall, within thirty (30) days after receipt of notice of EPA's determination, obtain and present to EPA for approval one of the other forms of financial assurance listed in Paragraph 111, above. In addition, if at any time EPA notifies Respondent that the anticipated cost of completing the Work has increased, then, within thirty (30) days after such notification, Respondent shall obtain and present to EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. Respondent's inability to demonstrate financial ability to complete the Work shall in no way excuse performance of any activities required under this Settlement Agreement.

113. If Respondent seeks to ensure completion of the Work through a guarantee pursuant to Paragraph 111.e or 111.f, Respondent shall (a) demonstrate to EPA's satisfaction that the guarantor satisfies the requirements of 40 C.F.R. Part 264.143(f); and (b) resubmit sworn statements conveying the information required by 40 C.F.R. Part 264.143(f) annually, on the anniversary of the Effective Date, or such other date as agreed by EPA, to EPA. For the purposes of this Settlement Agreement, wherever 40 C.F.R. Part 264.143(f) references "sum of current closure and post-closure costs estimates and the current plugging and abandonment costs estimates," the dollar amount to be used in the relevant financial test calculations shall be the current cost estimate of $1,700,000 for the Work plus any other RCRA, CERCLA or other federal environmental obligations financially assured by the Respondent or guarantor to EPA by means of passing a financial test.

114. If, after the Effective Date, Respondent can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph 111 of this Section, Respondent may, on any anniversary date of the Effective Date, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. Respondent shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section, and may reduce the amount of the security after receiving written approval from EPA. In the event of a dispute, Respondent may seek dispute resolution pursuant to Section XV (Dispute Resolution). Respondent may reduce the amount of security in accordance with EPA's written decision resolving the dispute.

115. Respondent may change the form of financial assurance provided under this Section at any time, upon notice to and prior written approval by EPA, provided that EPA determines that the new form of assurance meets the requirements of this Section. In the event

of a dispute, Respondent may change the form of the financial assurance only in accordance with the written decision resolving the dispute.

XXVII. INTEGRATION/APPENDICES

116. This Settlement Agreement and its appendices and any deliverables, technical memoranda, specifications, schedules, documents, plans, reports (other than progress reports), etc. that will be developed pursuant to this Settlement Agreement and become incorporated into and enforceable under this Settlement Agreement constitute the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The Parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Settlement Agreement. The following appendices are attached to and incorporated into this Settlement Agreement:

"Appendix A" is the SOW.

"Appendix B" consists of maps of the Site and Property.

XXVIII. ADMINISTRATIVE RECORD

117. EPA will determine the contents of the administrative record file for selection of the remedial action. Respondent shall submit to EPA documents developed during the course of the RI/FS upon which selection of the response action may be based. Upon request of EPA, Respondent shall provide copies of plans, task memoranda for further action, quality assurance memoranda and audits, raw data, field notes, laboratory analytical reports, and other reports. Upon request of EPA, Respondent shall additionally submit any previous studies conducted under state, local, or other federal authorities relating to selection of the response action, and all communications between Respondent and state, local, or other federal authorities concerning selection of the response action. At EPA's discretion, Respondent shall establish a community information repository at or near the Property, to house one copy of the administrative record.

XXIX. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION

118. This Settlement Agreement shall be effective the date that it is signed by the EPA Region 2 Director, Emergency and Remedial Response Division, or his delegatee.

119. This Settlement Agreement may be amended by mutual agreement of EPA and Respondent. Amendments shall be in writing and shall be effective when signed by EPA. EPA RPMs do not have the authority to sign amendments to the Settlement Agreement.

120. No informal advice, guidance, suggestion, or comment by the EPA RPM or other EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Respondent shall relieve Respondent of its obligation to obtain any formal approval

required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

XXX. NOTICE OF COMPLETION OF WORK

121. When EPA determines that all Work has been fully performed in accordance with this Settlement Agreement, with the exception of any continuing obligations required by this Settlement Agreement, including but not limited to access, post-removal site controls, retention of records and payment of Future Response Costs, EPA will provide written notice to Respondent. If EPA determines that any Work has not been completed in accordance with this Settlement Agreement, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the RI/FS Work Plan if appropriate in order to correct such deficiencies, in accordance with Paragraph 40 (Modification of the RI/FS Work Plan). Failure by Respondent to implement the approved modified RI/FS Work Plan shall be a violation of this Settlement Agreement.

It is so ORDERED AND AGREED this _____ day of _____, 2017.

BY:_____
Walter Mugdan
Director, Emergency and Remedial Response Division
U.S. Environmental Protection Agency, Region 2
290 Broadway
New York, NY 10007

Agreed this 2nd day of November, 2017.

For Respondent, Troy Chemical Corporation, Inc.

By: _____

ALEXANDER M. GERARDO
Printed Name

VICE PRESIDENT - GOVERNMENT RELATIONS
Title

Appendix A

APPENDIX A

ADMINISTRATIVE SETTLEMENT AGREEMENT
AND ORDER ON CONSENT STATEMENT OF WORK
FOR
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY OPERABLE
UNIT 2 (TROY CHEMICAL CORPORATION, INC. PROPERTY)
PIERSON'S CREEK SUPERFUND
SITE
Newark, Essex County, New Jersey

I. INTRODUCTION

A. The purpose of the remedial investigation/feasibility study ("RI/FS") is to present the nature and extent of contamination, evaluate human health and ecological risks posed by this contamination, and develop and evaluate remedial alternatives that address the contamination at Operable Unit 2 (OU-2), the Troy Chemical Corporation, Inc. property ("Property"), of the Pierson's Creek Superfund Site (the "Site") as provided in this Statement of Work ("SOW"). The RI and FS are interactive and will be conducted concurrently so that the existing data influences the development of remedial alternatives in the FS, which in turn affects the data needs.

B. Site investigations and remedial actions have been conducted since Troy acquired the Property in 1980. These were conducted under the regulatory authority of the New Jersey Department of Environmental Protection ("NJDEP") and the oversight of a New Jersey licensed site remediation professional ("LSRP"). During this oversight, several remedial actions were performed and several remedial alternatives and treatability studies were performed on the material in the concrete ditch and culvert. The concrete ditch and culvert were part of a City of Newark wastewater and storm water conveyance system that ultimately connected to Pierson's Creek. The Property is an operating chemical facility.

C. The RI/FS shall be conducted in a manner that minimizes environmental impacts in accordance with the Environmental Protection Agency (EPA) Region 2 Clean and Green Policy (available at www.epa.gov/region02/superfund/green_remediation/policy.html) to the extent consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300. Respondent shall follow "Data Quality Objectives Process for Hazardous Waste Property Investigations," EPA QA/G-4HW, January 2000, in planning and conducting the RI/FS.

D. Respondent shall produce draft RI/FS documents that are in accordance with this SOW, "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA" (EPA, Office of Emergency and Remedial Response, October 1988), and any other guidance that EPA uses in conducting a RI/FS, as appropriate and consistent with this SOW, as well as any additional requirements in the Administrative Settlement Agreement and Order on Consent ("Agreement"). The RI/FS Guidance describes the

report format and the required report content.

Respondent shall furnish all necessary personnel, materials, and services needed for, or incidental to, the performance of the RI/FS, except as otherwise specified in the Agreement.

E. At the completion of the RI/FS, EPA will be responsible for the selection of the remedy for OU-2 and will document the remedy selection in a Record of Decision ("ROD"). The remedial action alternative selected by EPA will meet the cleanup standards specified in CERCLA Section 121. That is, the selected remedial action will be protective of human health and the environment, will be in compliance with, or include a waiver of, applicable or relevant and appropriate requirements of other laws ("ARARs"), will be cost-effective, minimize disruption to the operating plant, will utilize permanent solutions and alternative treatment technologies or resource recovery technologies, to the extent practicable consistent with current and reasonably anticipated future land use, and will address the statutory preference for treatment as a principal element. The final RI/FS report, as adopted by EPA, with the administrative record, will form the basis for the selection of the remedy for OU-2 and will provide the information necessary to support the development of the ROD.

F. As specified in CERCLA Section 104(a) (1), EPA will provide oversight of Respondent's activities throughout the RI/FS. Respondent shall support EPA's initiation and conduct of activities related to the implementation of oversight activities.

G. In the event that there is a conflict between this SOW and the Agreement, the provisions of the Agreement govern.

II. TASK 1 - OU-2 SITE CHARACTERIZATION REPORT AND INITIAL RISK ASSESSMENT DOCUMENTS

A. Respondent has submitted to EPA:

1. Proposed Remedial Approach Report, Geosyntec Consultants, September 2015
2. Final CEA Biennial Certification Combined Report, Geosyntec Consultants, October 12, 2015
3. Site Characterization Report (SCR), Geosyntec Consultants, November 18, 2016
4. Responses to February 16, 2017 Comment Letter, July 31, 2017

These documents compile, review, and summarize existing data for OU-2. The existing data include the results of previous OU-2 investigations; historical OU-2 uses and operations; aerial photographs; regional geologic, hydrogeologic, and hydrologic information; surrounding land and water use; and other relevant information gathered over several decades of investigation on the Property.

Respondent has evaluated the quality of existing data and presented the findings in the OU-2 SCR. The usability of the data was evaluated in accordance with Guidance on Environmental Data Verification and Data Validation (EPA 240-R-02-004 QA/G-8, November 2002) and Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (EPA 540-R-08-005, January 2009).

B. Respondent has submitted a response letter to EPA's February 16, 2017 comments on the SCR submitted to Troy. Any outstanding items related to the SCR or EPA's comments thereon will be addressed in the RI/FS Work Plan, in the RI Report, or in a standalone letter correspondence to EPA.

C. Memorandum on Exposure Scenarios and Assumptions (MESA)
Within sixty (60) days after Respondent receives written notification of EPA's approval of the Agreement, Respondent shall submit a Memorandum of Exposure Scenarios and Assumptions ("MESA") describing the exposure scenarios and assumptions for the Baseline Human Health Risk Assessment (BHHRA), taking into account the present and reasonably anticipated future land use of the Property as industrial manufacturing and product distribution and based on Property conditions at the time the MESA is prepared. The MESA should include appropriate text describing the current Conceptual Site Model ("CSM") and exposure routes of concern for the Property, and include a completed RAGS Part D Table 1. This table shall describe the pathways that will be evaluated in the BHHRA, the rationale for their selection, and a description of those pathways that will not be evaluated. In addition, the MESA shall include a completed RAGS Part D Table 4 describing the exposure pathway parameters with appropriate references to EPA's 1991 Standard Default Assumptions and updated guidance developed by EPA. EPA may provide written comments on the MESA or approve the MESA. If written comments are received the Respondent shall amend and submit to EPA a revised MESA that is responsive to the directions of EPA's written comments, within thirty (30) days after receiving EPA's written comments or such longer time as specified or agreed to by EPA.

D. Screening Level Ecological Risk Assessment (SLERA)
Within sixty (60) days after Respondent receives written notification of EPA's approval of the Agreement, Respondent shall submit a SLERA in accordance with current Superfund ecological risk assessment guidance (Ecological Risk Assessment Guidance for Superfund, Process for Designing and Conducting Ecological Risk Assessments [ERAGS], USEPA, 1997 [EPA/540-R-97- 006], OSWER Directive 9285.7-25, June 1997). The SLERA shall include a comparison of the maximum contaminant concentrations in each media of concern to appropriate conservative ecotoxicity screening values, and should use conservative exposure estimates. EPA will review the SLERA and determine whether a full Baseline Ecological Assessment is required. EPA will provide written comments on or approve the SLERA. If comments are provided, the Respondent shall amend and submit to EPA a revised SLERA that is responsive to the directions of EPA's written comments, within thirty (30) days after receiving EPA's written comments or such longer time

as specified or agreed to by EPA.

E. If requested by EPA, within fourteen (14) days after submission of the MESA and SLERA, Respondent shall make a presentation to the EPA at which Respondent shall summarize the findings of the MESA and SLERA and discuss EPA's preliminary comments and concerns, if any, associated with the MESA and SLERA. EPA will either approve of the submittal pursuant to Section X (EPA Approval of Plans and Other Submissions) of the Agreement, or will provide written comments on the MESA and SLERA presentation.

III. TASK 2 - RI /FS WORK PLAN

A. Respondent shall submit to EPA a detailed work plan for the completion of the RI Report, and the FS Report and a schedule for the work related to OU-2 within thirty (30) days after Respondent receives written notification of EPA's approval of the Agreement. The RI sampling will be performed to resolve data gaps identified in the OU-2 SCR, and in EPA's February 16, 2017 comment letter on the SCR. Available OU-2-related information (as summarized in the SCR Report), including, but not limited to, existing sampling data, information on the historical use of the Property, and other material that reflects the historical waste disposal practices at the Property, will be used for planning the RI and FS work plan. The RI /FS work plan shall include a detailed schedule of activities through the submission of the FS. EPA will either approve the RI/FS work plan schedule pursuant to Section X (EPA Approval of Plans and Other Submissions) of the Agreement or will provide written comments. Respondent will submit a revised RI/FS work plan schedule that is responsive to the EPA's written comments for approval pursuant to Section X (EPA Approval of Plans and Other Submissions) of the Agreement, unless Respondent is directed otherwise by EPA in writing. The RI /FS work plan scope of work supplements the existing data and satisfies the following general requirements:

1. RI

The primary objectives of the RI are as follows:

- Confirm concentrations of potential contaminants of concern identified in the OU-2 SCR from soil boring locations within the interior of the Plant area that were collected in 2000. The interior Plant borings from 2000 were located outside of existing buildings and the concrete ditch/culvert.
- Collect surface soil data for the potential contaminants of concern from areas where workers may have direct contact exposure. These include areas where the existing cover (e.g. pavement or concrete) is in poor condition. The data will be collected to support the risk assessment.
- Verify shallow groundwater conditions along the upgradient property line (e.g. adjacent to the FedEx property) of OU-2. These

data will be used to assess potential sources of contaminants in shallow groundwater from upgradient locations.

- Review currently available data on shallow groundwater conditions, collect additional groundwater samples from existing and/or new shallow wells on the Property.
- Verify the presence or absence of contaminants in the intermediate and deep aquifer by collecting additional groundwater samples from existing and new intermediate and deep monitoring wells on the Property.
- Evaluate the subsurface to indoor air vapor intrusion pathway at OU-2 buildings using subslab, indoor air, and/or groundwater sampling.

2. Define Sources of Contamination

If data gaps exist regarding the sources of contamination on the Property, Respondent shall delineate the physical characteristics and chemical constituents and their concentrations for all known and discovered sources of contamination. For each such location, the areal extent and depth of contamination shall be determined using OU-2 data.

Defining the sources of contamination may include analyzing the potential for contaminant release (e.g., long-term leaching from soil), contaminant mobility and persistence, and characteristics important for evaluating remedial actions, including information to assess treatment technologies, as well as impacts from other neighboring sites and the urban background OU-2 conditions.

3. Describe the Nature and Extent of Contamination

Respondent shall gather any necessary supplemental information to characterize the nature and extent of contamination on the Property where data gaps exist according to conclusions of the above work in order to select a remedy for OU-2. To characterize the nature and extent of contamination, Respondent shall utilize the information on the OU-2 physical and biological characteristics and sources of contamination. The information on the nature and extent of contamination will be used to identify OU- 2 specific human health and ecological risks consistent with current and reasonably anticipated future land use. Respondent shall use this information to assess aspects of the appropriate remedial action alternatives to be evaluated.

4. Evaluate OU-2 Property Characteristics

Respondent shall collect, analyze, and evaluate the data to describe: (1) physical and biological characteristics at OU-2, (2) contaminant characteristics of sources, (3) nature and extent of contamination, (4) contaminant fate and transport, and (5) develop an OU-2-specific human health and ecological risk evaluation. Results of the analyses of the physical characteristics, source

characteristics, and extent of contamination will be utilized in the analysis of contaminant fate and transport for likely completed exposure pathways. The evaluation will include the actual and potential magnitude of releases from the sources, and horizontal and vertical spread of contamination as well as mobility and persistence of contaminants.

5. Data Management Procedures

Respondent shall consistently document the quality and validity of field and laboratory data compiled during the RI.

a. Document Field Activities

Information gathered during characterization of the Property will be consistently documented and adequately recorded by Respondent in field logs and laboratory reports. The method(s) of documentation must be specified in the QAPP. Field logs or dedicated field log-books must be utilized to document observations, measurements, and significant events that have occurred during field activities. Laboratory reports must document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

b. Maintain Sample Management and Tracking

Respondent shall maintain field reports, sample shipment records, analytical results, and QA/QC reports to ensure that only validated analytical data are reported and utilized in the risk assessment and evaluation of remedial alternatives. Analytical results developed under the work plan must be accompanied by, or cross-referenced to, a corresponding QA/QC report. In addition, Respondent shall safeguard chain of custody forms and other project records to prevent loss, damage, or alteration of project documentation.

6. Reuse Assessment

A Reuse Assessment is not required provided the Property remains an active manufacturing and product distribution facility or other industrial use which maintains the selected remedy. If the current use changes the EPA may determine a Reuse Assessment is required and will notify the Respondent. The Reuse Assessment Report should provide sufficient information to develop realistic assumptions of the reasonably anticipated future uses for the Property. Respondent shall prepare the Reuse Assessment Report in accordance with EPA guidance including, but not limited to, "Reuse Assessment: A Tool to Implement the Superfund Land Use Directive," OSWER Directive 9355.7-06P, June 4, 2001, or subsequently issued guidance. EPA may provide written comments on the submitted Reuse Assessment Report, in which case Respondent shall amend and submit to EPA a revised Reuse Assessment Report that is responsive to the directions of EPA's written comments.

7. Quality Assurance Project Plan (QAPP)

A QAPP will be developed for the RI work, as necessary. The QAPP shall be consistent with the Uniform Federal Policy for Quality Assurance Project Plans (UFP-QAPP), Parts 1, 2 and 3, EPA-505-B-04-900A, Band C, March 2005 or newer, and other guidance documents referenced in the afore mentioned guidance documents. The UFP documents may be found at: http://www.epa.gov/fedfac/documents/intergov_qual_task_force.htm. In addition, the guidance and procedures located in the EPA Region 2 DESA/HWSB web site: http://www.epa.gov/region02/qa/documents.htm, as well as other OSWER directives and EPA Region 2 policies should be followed, as needed.

a. All sampling, analysis, data assessment, and monitoring shall be performed in accordance with the "Region II CERCLA Quality Assurance Manual," Revision 1, EPA Region 2, dated October 1989, and any updates thereto, or an alternate EPA-approved test method, and the guidelines set forth in the Agreement. All testing methods and procedures shall be fully documented and referenced to established methods or standards.

b. The QAPP shall provide for collection of data sufficient to delineate Property related contamination in potentially affected media, to the extent necessary to select an appropriate remedy; to evaluate cross-media contaminant transport (e.g., groundwater to surface water or soil to surface water) as necessary to support the assessment of risks associated with potential or actual exposures to Property related contamination under current and reasonably likely future conditions; and to evaluate remedial alternatives that address Property related contamination (for example, sufficient engineering data for the projection of contaminant fate and transport and development and screening of remedial action alternatives, including information to assess treatment technologies).

c. The QAPP shall specifically include the following items:

i. An explanation of the way(s) the sampling, analysis, testing, and monitoring will produce data for the RI/FS;

ii. A detailed description of the sampling, analysis, and testing to be performed, including sampling methods, analytical and testing methods, sampling locations and frequency of sampling;

iii. A description of how sampling data to be generated following the effective date of this Agreement and a Property base map will be submitted in a manner that is consistent with the Region 2 Electronic Data Deliverable (EDD) format (information available at www.epa.gov/region02/superfund/medd.htm);

iv. Cultural Resources Survey Work Plan to address the requirements of the National Historic Preservation Act (see CERCLA Compliance with Other Laws Manual: Part II: Clean Air Act and Other Environmental Statutes and State Requirements, OSWER Directive 9234.1-02, August 1989, available at www.epa.gov/superfund/policy/remedy/pdfs/540g- 89009-s.pdf).

v. A map depicting sampling locations (to the extent that these can be defined when the QAPP is prepared); and

vi. A schedule for performance of the specific tasks in subparagraphs (c)(i)-(iii) of this Section III.B.1.

d. In the event that additional sampling locations, testing, and analyses are required beyond RI activities, Respondent shall submit a memorandum documenting the need for additional data to the EPA Project Coordinator within thirty (30) days of identification. EPA in its discretion will determine whether the additional data will be collected by Respondents and whether it will be incorporated into plans, reports and other deliverables.

e. To provide quality assurance and maintain quality control with respect to all samples to be collected, Respondent shall ensure the following:

i. Quality assurance and chain-of-custody procedures shall be performed in accordance with standard EPA protocol and guidance, including the guidance provided in the EPA Region 2 Quality Assurance Homepage, and the guidelines set forth in the Agreement.

ii. Once laboratories have been chosen, each laboratory's quality assurance plan ("LQAP") shall be submitted for review by EPA. In addition, the laboratory shall submit to EPA current copies (within the past six months) of laboratory certification provided from either a State or Federal Agency which conducts certification. The certification shall be applicable to the matrices and analyses that are to be conducted. If the laboratory does not participate in the Contract Laboratory Program ("CLP"), it must submit to EPA the results of performance evaluation ("PE") samples for the constituents of concern from within the past six months or it must complete PEs for the matrices and analyses to be conducted and the results must be submitted with the LQAP.

For any analytical work performed, including that done in a fixed laboratory, in a mobile laboratory, or in on-site screening analyses, Respondent must submit to EPA a "Non-CLP Superfund Analytical Services Tracking System" form for each laboratory utilized during a sampling event, within thirty (30) days after acceptance of the analytical results. Upon completion, such documents shall be submitted to the EPA Project Coordinator, with a copy of the form and transmittal letter to:

Regional Sample Control Center Coordinator
U.S. EPA Region 2
Division of Environmental Science & Assessment
2890 Woodbridge Avenue, Bldg. 209, MS-215
Edison, NJ 08837

iii. The laboratories utilized for analyses of samples must perform all selected analyses according to approved EPA methods.

iv. Unless indicated otherwise in the approved QAPP, upon receipt from the laboratory, all data shall be validated.

v. Submission of the validation package (checklist, report and Form I's containing the final data) to EPA, prepared in accordance with the provisions of Subparagraph vi. below as part of the RI Report submittal.

vi. Assurance that all analytical data that are validated as required by the QAPP are validated according to the latest version of EPA Region 2 data validation Standard Operating Procedures. Region 2 Standard Operating Procedures are available at: http://www.epa.gov/region02/qa/documents.htm,

Unless indicated otherwise in the QAPP, Respondent shall require deliverables equivalent to CLP data packages from the laboratory for analytical data. Upon EPA's request, Respondent shall submit to EPA

the full documentation (including raw data) for these analytical data. EPA reserves the right to perform an independent data validation, data validation check, or qualification check on generated data.

viii. Respondent shall insert a provision in their contract(s) with the laboratory utilized for analyses of samples that requires granting access to EPA personnel and authorized representatives of the EPA for the purpose of ensuring the accuracy of laboratory results related to the Property.

8. Health and Safety Plan (HSP)

A HSP shall be developed to address any RI scope of work and shall conform to 29 CFR §1910.120, "OSHA Hazardous Waste Operations Standards," and the EPA guidance document, "Standard Operating Safety Guidelines" (OSWER, 1988).

EPA will either approve the HSP pursuant to Section X (EPA Approval of Plans and Other Submissions) of the Agreement or will provide written comments. Respondent will submit a revised HSP that is responsive to the EPA's written comments for approval pursuant to Section X (EPA Approval of Plans and Other Submissions) of the Agreement, unless Respondents are directed otherwise by EPA in writing. which the Respondents will address.

9. Treatability Studies Work Plan (As Necessary)

If Respondent or EPA determines that additional treatability testing is necessary to complete the FS, then such additional treatability testing will be performed by Respondent to assist in the detailed analysis of alternatives. Data from previously performed treatability studies should be incorporated into the FS or referenced, as appropriate. If a decision to conduct additional treatability studies is made, the following activities will be performed by Respondent.

a. Evaluate Treatability Studies

Respondent and EPA will decide on the type of treatability testing to use (e.g., bench versus pilot). Because of the time required to design, fabricate, and install pilot scale equipment as well as perform testing for various operating conditions, the decision to perform pilot testing should be made as early in the process as possible to minimize potential delays of the FS.

b. Treatability Testing Work Plan

The Treatability Testing Work Plan shall describe remedial technology(ies) to be tested, test objectives, experimental procedures,

treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, health and safety, and residual waste management. The Data Quality Objectives ("DQOs") for treatability testing should be documented as well. If pilot-scale treatability testing is to be performed, the pilot-scale Work Plan will describe pilot plant installation and start-up, pilot plant operation and maintenance procedures, operating conditions to be tested, a sampling plan to determine pilot plant performance, and a detailed health and safety plan. If testing is to be performed off-site, Respondent shall address all necessary permitting requirements to the satisfaction of EPA.

IV. TASK 3-COMMUNITY RELATIONS

To the extent requested by EPA, Respondent shall provide information relating to the work required hereunder for EPA's use in developing and implementing a Community Relations Plan. As requested by EPA, Respondent shall participate in the preparation of appropriate information disseminated to the public, and participate in public meetings, which may be held or sponsored by EPA, to explain activities at or concerning the OU-2 Property.

V. TASK 4-REMEDIAL INVESTIGATION REPORT

Respondent shall prepare a Remedial Investigation (RI) Report that accurately establishes the OU-2 characteristics such as the contaminated media, nature and extent of contamination, and the physical boundaries of the contamination within ninety (90) days of receipt of comments on the MESA and the SLERA. This report shall summarize results of previous field activities to characterize OU-2, sources of contamination, and the fate and transport of contaminants.

Respondent shall obtain the data necessary to determine the nature and extent of contamination for the contaminants of potential concern (COPCs) consistent with expected exposure pathways. The COPCs will be identified based on persistence and mobility in the environment and the degree of hazard. Respondent shall establish OU-2 specific applicable, relevant or appropriate requirements (ARARs), and with EPA approval, shall use the approved ARARs to evaluate effects on human receptors who may be exposed to the COPCs above appropriate standards or guidelines where completed pathways of exposure to OU-2 COPCs currently exist or could occur under the current or reasonably anticipated future use of the Property. The RI Report will incorporate information presented in the OU-2 SCR and corresponding response letters, the MESA, and the SLERA.

The RI Report shall be written in accordance with the "Guidance for Conducting Remedial Investigations/Feasibility Studies under CERCLA," OSWER Directive 9355.3-01, October 1988, Interim Final (or latest revision) and "Guidance for Data Usability in Risk Assessment," (EPA/540/G-90/008), September 1990 (or latest

revision).

Respondent shall refer to the RI/FS Guidance, as appropriate, for an outline of the report format and contents. Following written comment by EPA, Respondent shall prepare a final RI Report which incorporates EPA's written comments, pursuant to Section X (EPA Approval of Plans and Other Submissions) of the Agreement.

In addition to the requirements described above, the RI Report will also include the following:

A. Risk Assessment

Actual and potential cancer risks and non-cancer hazards to human health shall be identified and characterized in accordance with CERCLA, the NCP, and EPA guidance documents including, but not limited to, the RI/FS Guidance, "Land Use in the CERCLA Remedy Selection Process" (OSWER Directive No. 9355.7-04) and the definitions and provisions of "Risk Assessment Guidance for Superfund ("RAGS")," Volume 1, "Human Health Evaluation Manual," (December 1989) (EPA/540/1-89/002). Other EPA guidance documents to be used in the development of risk assessments are identified in Attachment 1 to this SOW.

Incorporated into the Risk Assessment in the RI Report will be the following sections:

1. Pathway Analysis Report ("PAR")
Respondent shall prepare and submit a PAR as part of the Risk Assessment in the RI Report. The PAR shall be developed in accordance with OSWER Directive 9285.7-0lD dated January 1998 (or more recent version), entitled, *Risk Assessment Guidelines for Superfund Part D* and other appropriate guidance in Attachment 1 and updated thereto. The PAR shall contain the information necessary for a reviewer to understand how the risks at OU-2 will be assessed. The PAR will build on the MESA describing the risk assessment process and how the risk assessment will be prepared. The PAR shall include completed RAGS Part D Tables 2, 3, 5, and 6 as described below.

a) Chemicals of Potential Concern ("COPCs"). The PAR shall contain the information necessary for a reviewer to understand how the risks at OU-2 will be evaluated.

i. Based on the validated analytical data Respondent shall list the hazardous substances present in sampled media (e.g., groundwater, soils, sediment, etc.) and the COPCs as described in RAGS Part A.

ii. Table 2 Selection of COPCs. COPCs and associated concentrations in sample media for the PAR shall be

specified utilizing currently available and appropriate media-specific validated analytical data generated during the RI/FS. The selection of COPCs shall follow RAGS Part A and before hazardous substances are eliminated as COPCs they shall be evaluated against the residential and industrial screening levels in accordance with the "Regional Screening Levels for Chemical Contaminants at Superfund Sites" screening level/preliminary remediation goal website. (http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm). The industrial screening level shall not be used as a basis for eliminating any hazardous substance as a COPC. The COPCs shall be presented in completed RAGS Part D Table 2 format.

b) Table 3 - Media Specific Exposure Point Concentrations. Using the COPCs selected in Table 2, this Table shall summarize the Exposure Point Concentrations for all COPCs for the various media. The calculation of the Exposure Point Concentration shall follow the Supplemental Guidance to RAGS: Calculating the Concentration Term (1992), using EPA's ProUCL 4.0 2007 (or most recent version) Software, which evaluates the distribution of the data using Shapiro-Wilk' s and Lilliefor' s tests, in accordance with 2003 ProUCL's User's Guide. In those cases where the 95% Upper Confidence Limit ("UCL") exceeds the maximum, the maximum concentration shall be used as the Exposure Point Concentration.

c) Tables 5 and 6 -Toxicological Information. This section of the PAR shall provide the toxicological data (e.g., Cancer Slope Factors, Reference Doses, Reference Concentrations, Weight of Evidence for Carcinogens, and adjusted dermal toxicological factors where appropriate) for the COPCs. The toxicological data shall be presented in completed RAGS Part D Tables 5 and 6. The sources of data in order of priority are:

- Tier 1 - Integrated Risk Information System ("IRIS") database (EPA, current version).
- Tier 2 - Provision Peer Reviewed Toxicity Values ("PPRTV") - The Office of Research and Development/National Center for Environmental Assessment/Superfund Health Risk Technical Support Center ("STSC") develops PPRTVs on a chemical specific basis when requested by EPA's Superfund program. Provisional values will either be obtained from the "Regional Screening Levels for Chemical Contaminants at Superfund Sites" or from Region 2.

- Tier 3 - Other Toxicity Values - Tier 3 includes additional EPA and non-EPA sources of toxicity information. Priority will be given to those sources of information that are the most current, the basis for which is transparent and publicly available and which have been peer reviewed. Tier 3 values include toxicity values obtained from CalEPA, Agency for Toxic Substances and Disease Registry's ("ATSDR's") Minimum Risk Levels ("MRLs") and toxicity values obtained from the HEAST (EPA 1997 b).

To facilitate a timely completion of the PAR, Respondent shall submit a list of chemicals for which IRIS values are not available to EPA as soon as identified, thus allowing EPA to facilitate obtaining this information from EPA's National Center for Environmental Assessment.

2. Baseline Human Health Risk Assessment (BHHRA) and Baseline Ecological Risk Assessment (BERA)

This section of the RI Report shall include completed RAGS Part D 7 through 10 summarizing the calculated cancer risks and non-cancer hazards and appropriate text in the risk characterization with a discussion of uncertainties and critical assumptions (e.g., background concentrations and conditions). Respondent shall perform the BHHRA and if necessary, the BERA in accordance with the approach and parameters described in the MESA, SLERA, and the PAR, as described above.

If the BERA is determined to be required, it shall address the following:

i. Hazard Identification (sources): Respondent shall review available information on the hazardous substances present at OU-2 and identify the major contaminants of concern.

ii Dose-Response Assessment: Respondent shall identify and select contaminants of concern based on their intrinsic toxicological properties.

iii. Characterization of OU-2 and Potential Receptors: Respondent shall identify and characterize environmental exposure pathways.

iv Chemicals, Indicator Species, and End Points: In preparing the assessment, Respondent shall select representative chemicals, indicator species (species which are especially sensitive to environmental contaminants), and end points on which to

concentrate.

v. Exposure Assessment: The exposure assessment shall identify the magnitude of actual or environmental exposures, the frequency and duration of these exposures, and the routes by which receptors are exposed. The exposure assessment shall include an evaluation of the likelihood of such exposures occurring and shall provide the basis for the development of acceptable exposure levels. In developing the exposure assessment, Respondent shall develop reasonable maximum estimates of exposure for both current land use conditions and potential land use conditions at the Property.

vi. Toxicity Assessment/Ecological Effects Assessment: The toxicity and ecological effects assessment shall address the types of adverse environmental effects associated with chemical exposures, the relationships between magnitude of exposures and adverse effects, and the related uncertainties for contaminant toxicity.

vii. Risk Characterization: During risk characterization, chemical-specific toxicity information, combined with quantitative and qualitative information from the exposure assessment, shall be compared to measured levels of contaminant exposure levels and/or the levels predicted through environmental fate and transport modeling. These comparisons shall determine whether concentrations of contaminants at or released from the Property are affecting or could potentially affect the environment.

viii. Identification of Limitations/ Uncertainties: Respondent shall identify critical assumptions (e.g., background concentrations and conditions) and uncertainties in the report.

ix. Conceptual OU-2 Model: Based on contaminant identification, exposure assessment, toxicity assessment, and risk characterization, Respondent shall revise the Preliminary CSM, as appropriate.

B. Identification of Candidate Technologies and Development and Screening of Remedial Alternatives Memorandum

An Identification of Candidate Technologies and Development and Screening of Remedial Alternative Memorandum shall be prepared by the Respondent. This document will be submitted as a standalone deliverable.

The candidate technologies identified shall include appropriate treatment

technologies (as defined in the RI/FS Guidance) where appropriate. Data from previously performed treatability studies will be incorporated into the memorandum or referenced, as appropriate. Additionally, the Respondent shall develop and evaluate remedial action objectives that ensure protection of human health and the environment consistent with exposure pathways confirmed in the Baseline Risk Assessment. The development and screening of remedial alternatives shall identify and develop an appropriate range of remedial action objectives consistent with OU-2 conditions at the time Work is conducted. This range of alternatives should include options in which treatment is used to reduce the toxicity, mobility, or volume of wastes, including, at a minimum, the principal threats posed by OU-2, but that vary in the types of treatment, the amount treated, and the manner in which long-term residuals or untreated wastes are managed; options involving containment with little or no treatment; options involving both treatment and containment; and a No-Action alternative. The following activities will be performed as a function of the development and screening of remedial alternatives.

1. Develop Remedial Action Objectives

Respondent shall develop remedial action objectives, which are medium specific or operable-unit specific goals for protecting human health or the environment that specify the COCs, exposure route(s) and receptor(s) and preliminary remediation goals.

2. Develop General Response Actions

Respondent shall develop general response actions for each medium of interest defining containment, treatment, excavation, pumping, or other actions, singly or in combination to satisfy the remedial action objective.

3. Identify Areas or Volumes of Media

Respondent shall identify areas or volumes of media to which general response actions may apply, taking into account requirements for protectiveness as identified in the remedial action objectives. The chemical and physical characterization of OU-2 will also be taken into account.

4. Assemble and Document Alternatives

Respondent shall assemble selected representative technologies into alternatives for each affected medium.

Together, all of the alternatives will represent a range of treatment and containment combinations that will address OU-2. A summary of the assembled alternatives and their related action-specific ARARs will be

prepared by Respondent for inclusion in the Development and Screening of Remedial Alternatives Technical Memorandum.

The reasons for eliminating alternatives during the preliminary screening process must be specified.

5. Refine Alternatives

Respondent shall refine the remedial alternatives to identify contaminant volume addressed by the proposed process and sizing of critical unit operations as necessary. Sufficient information will be collected for an adequate comparison of alternatives. Preliminary Remediation Goals (or Regional Screening Levels) for each chemical in each medium will also be modified as necessary to incorporate any new risk assessment information presented in the baseline risk assessment report. Additionally, action specific ARARs will be updated as the remedial alternatives are refined.

6. Conduct and Document Screening Evaluation of Each Alternative

Respondent may perform a final screening process based on short and long term aspects of effectiveness, implementability, and relative cost. Generally, this screening process is only necessary when there are many feasible alternatives available for detailed analysis. If necessary, the screening of alternatives will be conducted to assure that only the alternatives with the most favorable composite evaluation of all factors are retained for further analysis. As appropriate, the screening will preserve the range of treatment and containment alternatives that was initially developed. The range of remaining alternatives will include options that use treatment technologies and permanent solutions to the maximum extent practicable.

C. Draft Remedial Investigation Report

EPA may provide written comments on the draft RI Report, in which case Respondent shall amend and submit to EPA a revised report that is responsive to all of EPA's written comments.

Within fourteen (14) days after submission of the draft RI Report, Respondent shall make a presentation to the EPA at which Respondent shall summarize the findings of the draft RI Report and discuss EPA's preliminary comments and concerns, if any, associated with the draft RI Report. EPA will either approve of the submittal pursuant to Section X (EPA Approval of Plans and Other Submissions) of the Agreement, or will provide written comments on the Draft RI Report.

D Final Remedial Investigation Report

Within ninety (90) days after receiving EPA's written comments on the Draft RI Report, or such longer time as specified or agreed to by EPA, Respondent shall amend and submit to EPA a Final RI Report that is responsive to the directions in all of EPA's written comments unless Respondent are directed otherwise by EPA in writing.

VI. TASK 5 - IMPLEMENTATION OF RI or TREATABILITY TESTING, AS NECESSARY

A. Following EPA's written approval or modification of the RI/FS Work Plan, pursuant to Section X of the Settlement Agreement, Respondent shall implement the RI activities to further characterize the Property, as necessary. Respondent shall notify EPA at least fourteen (14) days in advance regarding the planned dates for any field investigation activities.

B. Respondent shall provide EPA with validated analytical data within ninety (90) days after each sampling activity, in the electronic format required by EPA at the time of submission, showing the location, medium and results.

C. Within seven (7) days after completion of field activities, Respondent shall so advise EPA in writing.

VII. TASK 6-MONTHLY PROGRESS REPORTS AND BI-MONTHLY MEETINGS

Respondent shall provide a monthly progress report and participate in meetings with EPA at major milestones in the RI/FS process, as described herein and outlined in the RI Report/FS work plan. The monthly progress reports shall be submitted to EPA by the 15th day of the following month. At a minimum, with respect to the preceding month, these progress reports shall (1) describe the actions which have been taken to comply with this Agreement during that month, (2) include a summary of sampling and tests performed at OU-2 by the Respondent, (3) describe Work planned for the next two months with schedules relating such Work to the overall project schedule for RI/FS completion, and (4) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

Additionally, the Respondent and EPA will hold bi-monthly (e.g. every other month) meetings to facilitate reviews and discuss interim deliverables. The meetings will be technically focused. Fourteen days (14 days) prior to the meeting the Respondent will send an agenda to the EPA and support information that will be discussed in the meeting. The meetings may be postponed, combined with other milestone meetings or canceled if agreed upon by the Respondent and EPA.

VIII. TASK 7 -FEASIBILITY STUDY REPORT

Respondent shall prepare a FS Report consisting of a detailed analysis of the remedial alternatives, in accordance with the NCP as well as the most recent guidance. The detailed analysis will focus on alternatives identified from the screening process as part of Task 4 above. Respondent shall submit to EPA a draft FS Report which reflects the findings in the approved Baseline Risk Assessment. Respondent shall refer to the RI/FS Work Plan and the RI/FS Guidance, as appropriate, and this SOW for report content and format. Respondent shall obtain the data necessary to determine the key contaminants movement and extent of contamination. The key contaminants are selected based on persistence and mobility in the environment and the degree of hazard. Respondent shall use existing standards and guidelines and other criteria as specified in the ARARs accepted by EPA for OU-2. Standards identified in the ARAR analysis deemed appropriate for OU-2 will be used to evaluate whether human receptors may be exposed to OU-2 COCs above those standards or guidelines. Within fourteen (14) days after submission of the draft FS Report, Respondent shall make a presentation to EPA at which Respondent shall summarize the findings of the draft FS Report and discuss EPA's preliminary comments and concerns, if any, associated with the draft FS Report. EPA will either approve of the submittal pursuant to Section X (EPA Approval of Plans and Other Submissions) of the Agreement, or will provide written comments on the draft FS Report. Within sixty (60) days after receiving EPA's written comments on the draft FS Report, Respondent will submit a revised FS Report that is responsive to the directions of EPA's written comments to EPA for approval pursuant to Section X (EPA Approval of Plans and Other Submissions) of the Agreement, unless Respondent is directed otherwise by EPA in writing.

A. The FS report shall:

1. Describe existing remedial measures or responses
2. Incorporate RI and/or treatability study information
3. Incorporate information from OU-2 SCR and RI Report
4. Summarize Feasibility Study objectives
5. Summarize remedial action objectives
6. Articulate general response actions
7. Identify and screen remedial technologies
8. Describe remedial alternatives
9. Incorporate a detailed analysis of remedial alternatives

10. Present a summary and conclusions

Respondent's technical feasibility considerations shall include the careful study of any problems that may prevent a remedial alternative from mitigating OU-2 problems. Therefore, OU-2 characteristics from the RI must be kept in mind as the technical feasibility of the alternative is studied. Specific items to be addressed are reliability (operation over time), safety, operation and maintenance, ease with which the alternative can be implemented, and time needed for implementation.

1. Detailed Analysis of Alternatives

Respondent shall conduct a detailed analysis of alternatives which will consist of an analysis of each option against the nine evaluation criteria specified in the NCP and a comparative analysis of all options using the same evaluation criteria as a basis for comparison.

2. Apply Nine Criteria and Document Analysis

Respondent shall apply the nine evaluation criteria to the assembled remedial alternatives to ensure that the selected remedial alternative will be protective of human health and the environment; will be in compliance with, or include a waiver of, ARARs; will be cost-effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies, to the extent practicable consistent with current and reasonably anticipated future land use; and will address the statutory preference for treatment as a principal element. The evaluation criteria are: (1) overall protection of human health and the environment; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume through treatment; (5) short-term effectiveness; (6) implementability; (7) cost; (8) State (or support agency) acceptance; and (9) community acceptance.

For each alternative, Respondent shall provide: (1) a description of the alternative that outlines the remedial strategy involved and identifies the key ARARs associated with each alternative, and (2) a discussion of the individual criterion assessment. If Respondent does not have direct input on criteria (8) State (or support agency) acceptance and (9) community acceptance, these criteria will be addressed by EPA.

3. Compare Alternatives Against Each Other and Document the Comparison of Alternatives

Respondent shall perform a comparative analysis between the remedial alternatives. That is, each alternative will be compared against the others using the nine evaluation criteria as a basis of comparison. Identification and selection

of the preferred alternative are reserved by EPA. Respondent shall incorporate theresults of the comparative analysis in the FS Report.

Attachment A

ATTACHMENT A

REFERENCES FOR CITATION

The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the RI/FS process:

The National Hazardous Substance and Oil Pollution Contingency Plan, 40 CFR 300 *et seq.*

"Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA," U.S. EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive No. 9355.3-01 ·

"Interim Guidance on Potentially Responsible Party Participation in Remedial Investigation and Feasibility Studies," U.S. EPA, Office of Waste Programs Enforcement, Appendix A to OSWER Directive No. 9355.3-01.

"Guidance on Oversight of Potentially Responsible Party Remedial Investigations and Feasibility Studies," U.S. EPA, Office of Waste Programs Enforcement, OSWER Directive No. 9835.3.

"A Compendium of Superfund Field Operations Methods," Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, EPA/540/P-87/001a, August 1987, OSWER Directive No. 9355.0-14.

"EPA NEIC Policies and Procedures Manual," May 1978, revised November 1984, EPA-330/9-78-001-R.

"Data Quality Objectives for Remedial Response Activities," U.S. EPA, Office of Emergency and Remedial Response and Office of Waste Programs Enforcement, EPA/540/G-87/003, March 1987, OSWER Directive No. 9335.0-7B.

"Guidelines and Specifications for Preparing Quality Assurance Project Plans," U.S. EPA, Office of Research and Development, Cincinnati, OH, QAMS-004/80, December 29, 1980.

"EPA Requirements for QAPPs for Environmental Data Operations," U.S. EPA, Office of Emergency and Remedial Response, QA/R-5, October 1998.

"Interim Guidelines and Specifications for Quality Assurance Project Plans," U.S. EPA, Office of Emergency and Remedial Response, QAMS-005/80, December 1980.

"Users Guide to the EPA Contract Laboratory," U.S. EPA, Sample Management Office, August 1982.

"CERCLA Compliance with Other Laws Manual," Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, August 1988 (draft), OSWER Directive No. 9234.1-01 and -02.

"Guidance on Remedial Actions for Contaminated Ground Water at Superfund Sites," U.S. EPA, Office of Emergency and Remedial Response, (draft), OSWER Directive No. 9283.1-2.

"Draft Guidance on Superfund Decision Documents," U.S. EPA, Office of Emergency and Remedial Response, March 1988, OSWER Directive No. 9355.-02.

"Risk Assessment Guidance for Superfund - Volume I Human Health Evaluation Manual" (Part A), EPA/540/1-89/002.

"Risk Assessment Guidance for Superfund - Volume I Human Health Evaluation Manual" (Part B), EPA/540/R-92/003.

"Risk Assessment Guidance for Superfund - Volume II Environmental Evaluation Manual," March 1989, EPA/540/1-89/001.

"Guidance for Data Usability in Risk Assessment," October, 1990, EPA/540/G-90/008.

"Performance of Risk Assessments in Remedial Investigation/ Feasibility Studies (RI/FSs) Conducted by Potentially Responsible Parties (PRPs)," August 28, 1990, OSWER Directive No.9835.15.

"Risk Evaluation of Remedial Alternatives" (Part C), December 1991, OSWER Directive 9285.7-0lC.

"Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions," April 22, 1991, OSWER Directive No. 9355.0-30.

"Supplemental Guidance to RAGS: Calculating the Concentration Term," May 1992, OSWER Directive 9285.7-081.

"Health and Safety Requirements Employed in Field Activities," U.S. EPA, Office of Emergency and Remedial Response, July 12, 1981, EPA Order No. 1440.2.

OSHA Regulations in 29 CFR 1910.120 (Federal Register 45654, December 19, 1986).

"Interim Guidance on Administrative Records for Selection of CERCLA Response Actions," U.S. EPA, Office of Waste Programs Enforcement, March 1, 1989, OSWER Directive No. 9833.3A.

"Community Relations in Superfund: A Handbook," U.S. EPA, Office of Emergency and Remedial Response, June 1988, OSWER Directive No. 9230.03B.

"Community Relations During Enforcement Activities And Development of the Administrative Record," U.S. EPA, Office of Programs Enforcement, November 1988, OSWER Directive No. 9836.0-la.

"Considering Reasonably Anticipated Future Land Use and Reducing Barriers to Re-use at EPA-Lead Superfund Remedial Sites," U.S. EPA Office of Superfund Remediation and Technology Innovation, March 17, 2010, OSWER Directive 9355.7-19.

"Reuse Assessment: A Tool to Implement the Superfund Land Use Directive," OSWER Directive 9355.7-06P, June 4, 2001. Available at: www.cluin.org/download/toolkit/thirdednew/reuseassesstool.pdf

"Interim Guidance on Implementing the Superfund Administrative Reform on PRP Oversight," U.S. EPA, Office of Emergency and Remedial Response, May 17, 2000, OSWER Directive No. 9200.0-32P. Available at: www.epa.gov/superfund/programs/reforms/final01.pdf

EPA Region 2 Clean and Green Policy. Available at: www.epa.gov/region02/superfund/green_remediation/policy.html

National Historic Preservation Act, 16 U.S.C. § 470 et seq.

HUMAN HEALTH RISK ASSESSMENT GUIDANCE DOCUMENTS

Superfund Risk Assessment Guidance

USEPA, 1989, Risk Assessment Guidance for Superfund(RAGS); Volume I Human Health Evaluation Manual Part A. OERR. EPA/540/1-89/002. Available at: www.epa.gov/superfund/programs/risk/ragsa/index.htm

USEPA, 1990, Risk Assessment Guidance for Superfund (RAGS); Volume I, Human Health Evaluation Manual, (Part B, Development of Risk-Based Preliminary Remediation Goals) OERR, EPA/540/R-92/003. Available at: www.epa.gov/ superfund/programs/risk/ragsb/index.htm

USEPA, 1991. Risk Assessment Guidance for Superfund (RAGS); Volume I, Human Health Evaluation Manual (Part C, Risk Evaluation of Remedial Alternatives), OSWER Directive 9285.7-01C, December 1991. Available at: www.epa.gov/superfund/programs/risk/ragsc/index.htm

USEPA, 1996. Revised Policy on Performance of Risk Assessments During Remedial Investigation/Feasibility Studies (RI/FS) Conducted by Potentially Responsible Parties, OSWER Directive No. 9340.1-02 mistakenly numbered 9835.15c.

USEPA, 1997. Risk Assessment Guidance for Superfund (RAGS); Volume I, Human Health Evaluation Manual, Part D., OERR, Interim Publication No. 9285.7-01D. Available at: www.epa.gov/superfund/programs/risk/ragsd/index.htm

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USEPA, 1999. Risk Assessment Guidance for Superfund (RAGS). Volume I, Community Involvement in Superfund Risk Assessments. OSWER 9285.7-01, EPA540-R-98-042, PB-99-96303, March 1999. Available at: www.epa.gov/superfund/programs/risk/ragsa/cl_ra.pdf.

Exposure Factors

USEPA, 1991, RAGS Volume I: Human Health Evaluation Manual Supplemental Guidance. Standard Default Exposure Factors. OSWER Directive 9285.6-03. March 25, 1991.

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USEPA, 1995. EPA Risk Characterization Program. Memo from Administrator Carol Browner dated March 21, 1995. Available at: www.epa.gov/ordntrnt/ORD/spc/2riskchr.htm1.

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USEPA, 1993. Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities. OSWER Directive #9355.4-12.

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USEPA, 1995. Policy on Policy on Evaluating Health Risks to Children. Available at: www.epa.gov/ORD/spc/memohlth.html.

Additional Guidance

USEPA, 1997. Special Report on Environmental Endocrine Disruption: An Effects Assessment and Analysis. EPA/630/R-96/012. February, 1997 Available at: www.epa.gov/ORD/WebPubs/endocrine

USEPA, 1997. Cumulative Risk Assessment Guidance-Phase I Planning and Scoping. Memorandum to: Assistant Administrators, General Counsel, Inspector General, Associate Administrators, Regional Administrators and Staff Office Directors, dated July 3, 1997. Available at: http://www.epa.gov/ORD/spc/cumulrsk.html.

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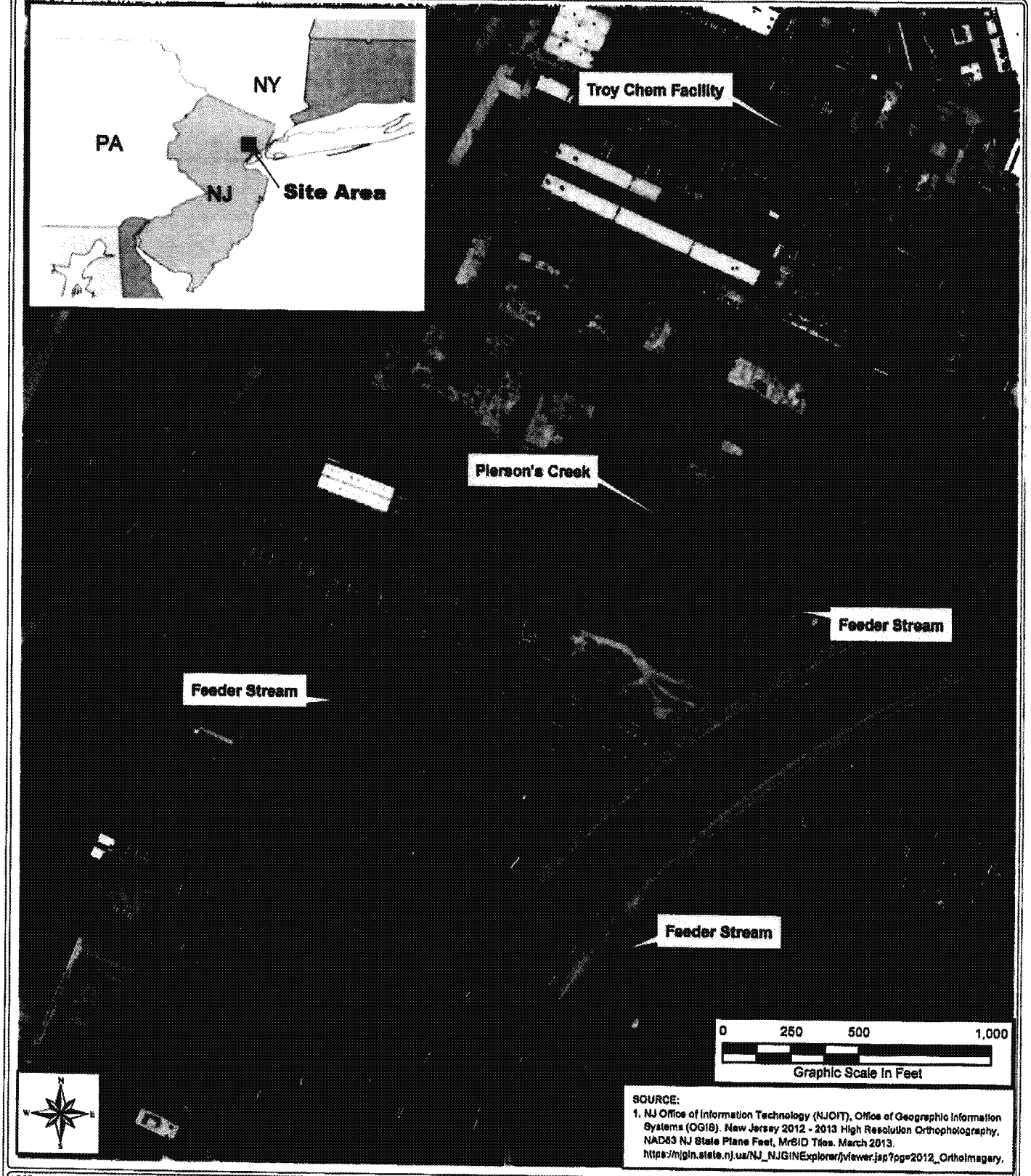
Chemical Specific Documents of Interest

Chemical specific documents for mercury, lead, and perchlorate are available at: www.epa.gov/nceawwwl/healthri.html.

EPA homepage for human health risk assessment documents: http://www.epa.gov/superfund/programs/risk/toolthh.htm#GG.

A146

Appendix B



SOURCE:
1. NJ Office of Information Technology (NJOIT), Office of Geographic Information Systems (OGIS). New Jersey 2012 - 2013 High Resolution Orthophotography. NAD83 NJ State Plane Feet, MrSID Tiles. March 2013. https://njgin.state.nj.us/NJ_NJGINExplorer/jviewer.jsp?pg=2012_Orthoimagery.

LEGEND:
Pierson's Creek
Feeder Streams (Unnamed Tributaries)
Flow Direction
Facility Boundary

TITLE:
Location Map
Troy Chem Corp Inc
Newark, Essex County, NJ

PROJECT: Troy Chem Corp Inc

CLIENT NAME: EPA

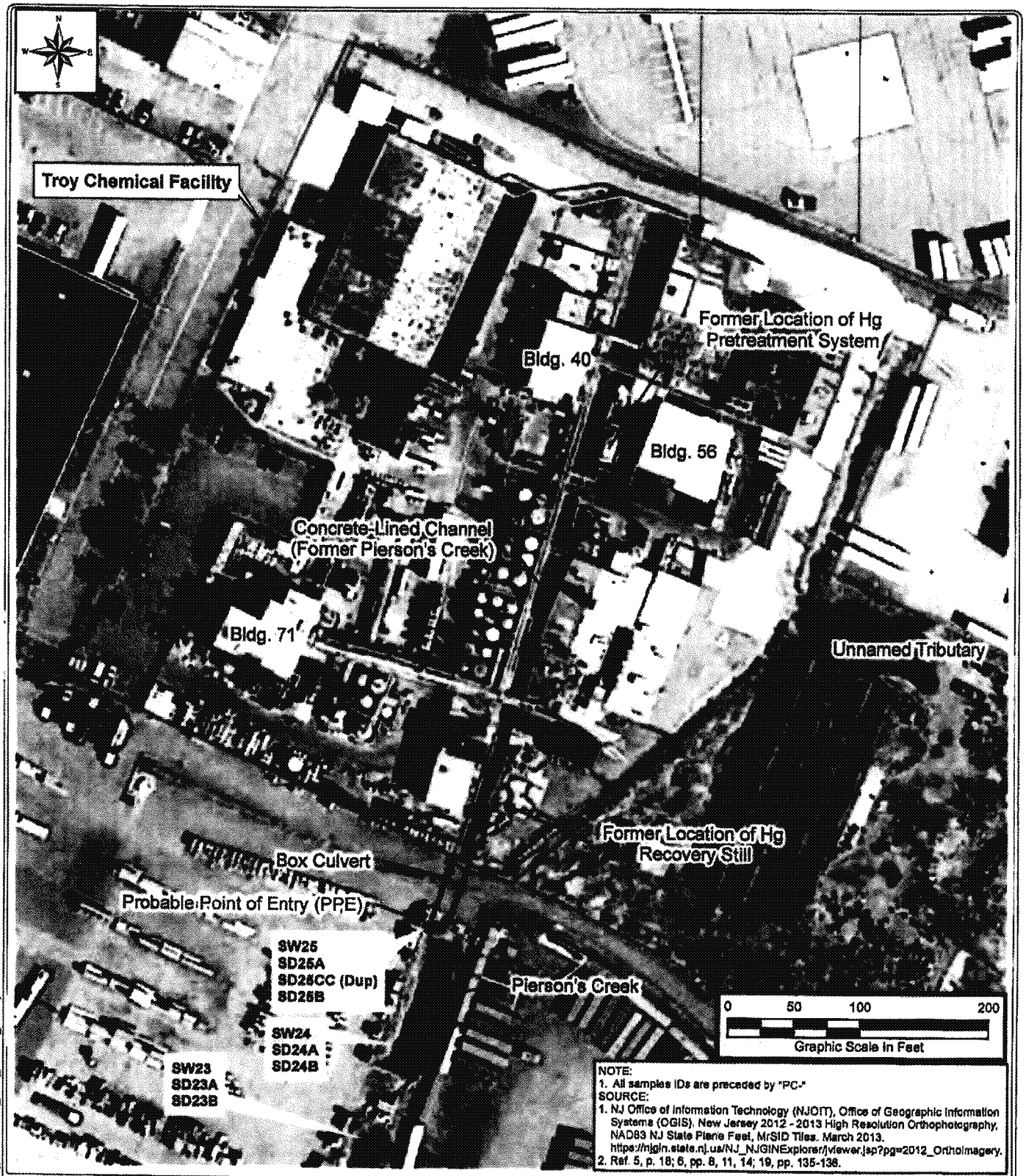
WESTON

DATE: August 2013

FIGURE #: 1

P:\SAT2\Piersons Creek\MXD\2013_08_HRS\133534_TCC_Site_Loc_201308.mxd

AMG



NOTE:
1. All samples IDs are preceded by "PC-"

SOURCE:
1. NJ Office of Information Technology (NJOIT), Office of Geographic Information Systems (OGIS). New Jersey 2012 - 2013 High Resolution Orthophotography. NAD83 NJ State Plane Feet, MrSID Tiles. March 2013. https://njgin.state.nj.us/NJ_NJGINExplorer/viewer.jsp?pg=2012_Orthoimagery.
2. Ref. 5, p. 16; 6, pp. 8, 11, 14; 19, pp. 135-136.

LEGEND:
- Sample Location
- Facility Boundary

TITLE:

Historical Facility Map
Troy Chem Corp Inc
Newark, Essex County, NJ

PROJECT: Troy Chem Corp Inc

CLIENT NAME: EPA

WESTON

DATE: August 2013

FIGURE #: 2

P:\SAT2\Piersons Creek\MXD\2013_08_HRS113585_TCC_Historic_Facility.mxd

Message

From: Van Hook, D. Evan [Evan.VanHook@honeywell.com]
Sent: 8/14/2017 10:46:51 PM
To: Kelly, Albert [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=08576e43795149e5a3f9669726dd044c-Kelly, Albe]
CC: Morris, John [John.Morris@honeywell.com]
Subject: Superfund Conference, September 7, 2017
Attachments: AIRROC EECMA Agenda 8 9 17.pdf

Task Force Chairman Kelly,

Honeywell appreciates the opportunity we had, through the industry group AROW, to contribute to the important work of the CERCLA Task Force. We are impressed with the Recommendations and are excited about the prospect of moving our CERCLA sites more quickly through the process.

The Recommendations have created a good deal of enthusiasm within the industrial sectors that we interact with. That enthusiasm will be evident at the upcoming "Mega-Superfund Site Symposium" on September 7, 2017 in Philadelphia (agenda and information attached). Honeywell is working with George Rusk of Ecology and Environment, on behalf of the Symposium's sponsors, to finalize the speakers' list. We thought it would be a great opportunity for you or someone from your staff to talk publicly about the Task Force's recommendations.

The keynote speaker is being held open (9:40 on the enclosed agenda) in the hopes you or someone from your senior staff will fill the slot. There is also an opening for a speaker in a panel forum that is titled "Great Lakes Legacy Act, Superfund Reform and Lessons Learned from the Hudson River." Someone from your Task Force team might find that forum interesting from a number of perspectives; Panel Forum is at 2:25 on the 7th.

We all understand that you and the EPA staff have many commitments. While we acknowledge that our offer does not provide much lead time this is a very opportune time to be interacting with an audience that has so much vested in the success of the CERCLA process.

Please let me know your interest in this offer. Thank you for the consideration.

D. Evan van Hook
Corporate V.P.
Health, Safety, Environment,
Product Stewardship and Sustainability
Honeywell
115 Tabor Road
Morris Plains, NJ 07950

Ex. 6

AIRROC & EECMA Present
Mega-Superfund Site Symposium
September 7, 2017

Convene at Cira Centre, 30th Street Station
2929 Arch Street, Philadelphia, PA

This one-day symposium will address the many challenges that arise from Mega Superfund Sites, such as the Portland Harbor, the Lower Passaic River and other similar contaminated sediment sites, with remediation costs estimated in the billions. The conference will cover the regulatory climate governing such sites under the current Administration, a discussion of a proposed expansion of the Great Lakes Legacy Act scheme, the unique challenges concerning the remediation of these sites, the Natural Resource Damage components of these sites, how the complex legal liability allocation process works and defenses to liability, and the insurance coverage implications. It will bring together thought leaders from industry, the legal profession, the scientific community, environmental consulting firms, academia, government regulators, and the insurance industry. This is an essential conference for all stakeholders involved with these sites and is intended to be a launching pad for further discussion, learning and networking around these issues.

Schedule

9:00 AM **Arrival and Registration**

9:30 AM **Welcome**
Carolyn Fahey, Executive Director, AIRROC
Gregory Kelder, Executive Director, EECMA

9:40 AM **Keynote Address**

10:00 AM **Characteristics of Mega-Superfund Sites and Remediation Challenges**
This panel will discuss key developments at Superfund mega-sites, including the technical and legal concerns associated with the longer-term wrap up and closure of large, complex sites. Our speakers will address a host of emerging issues, including EPA Administrator Scott Pruitt's recently announced set of Task Force recommendations that are aimed at improving the Superfund program. This interactive session will explore EPA's support of increased use of adaptive management strategies for major sites, especially when focusing on early action remedies to reduce quickly the risks at a site. The panel will conclude with a discussion of key takeaways on the technical and practical issues, which

consultants and lawyers must consider in counseling clients at Superfund mega-sites.

Panelists:
Peter Alvey, P.E., Vice President & Principal Engineer, Roux Associates, Inc.
Kieran Purcell, P.E., LEED AP, Principal Consultant, Rimkus Consulting Group, Inc.
David C. Weber, Principal, Beveridge & Diamond, P.C.

11:00 AM Networking Break

11:10 AM **Liability Defenses and Natural Resource Damages**
The second component of the CERCLA liability scheme addresses liable parties paying for damages caused to natural resources. Compensation paid is generally restricted in its use to paying for restoration of the damaged resources. This panel will discuss emerging issues in natural resource damages liability claims and defenses. It will consider the state of the art in damages assessment proceedings, discuss trends in litigation initiated by tribes and other trustees, and will evaluate federal efforts to innovate with respect to settlement mechanisms and to stimulate early restoration efforts at mega-sites.

Panelists:
Loren Dunn, Partner, Beveridge & Diamond, P.C.
Ira Gottlieb, Partner, McCarter & English, LLP
Mark Laska, Founder and President, Great Ecology

12:10 PM **Networking Luncheon**

1:00 PM **Challenging Issues in Allocation of Liability**
Allocating CERCLA liability at Mega-Superfund Sites, often among hundreds of PRPs and involving many decades of disposal, requires creativity in science, history, law and deal-making. What works and doesn't work in these settings will be the subject of the panel-members: Court or ADR? Binding or Nonbinding? EPA's involvement – a facilitator or hindrance? We will consider the benefit of detailed "'fact-based" approaches to allocation v. "broad-brush" industry/time-on-site/pathway assumptions? The panel will explore who are the winners and losers in various resolution models and approaches. There is much to explore.

Panelists:
Larry Silver, Partner, Langsam Stevens Silver & Hollaender LLP
Bill Hengemihle, Senior Managing Director, FTI Consulting
Teresa C. Michelsen, Principal Environmental Scientist, Farallon Consulting, L.L.C.

2:15 PM **Networking Break**

2:25 PM **Great Lakes Legacy Act, Superfund Reform and Lessons Learned from the Hudson River**
Mega Site remediation is one of the most complex, intractable and difficult challenges facing USEPA. This panel will focus on USEPA's highly successful and environmentally sound implementation of cost effective sediment site cleanup

under the Great Lakes Legacy Act (GLLA); discuss the complementary pilot program developed by the U.S Army Corps of Engineers (USACE) and enacted by Congress in the Water Resources Development Act (WRDA) for the clean-up of contaminated sediment sites and the economic development of our nation's rivers and harbors; and explore how these programs can be combined to provide the framework for USEPA and USACE to break the current Mega Site gridlock to achieve the new administration's goals of fiscal restraint, infrastructure development, job creation, private sector investment and innovation – while remaining true to the longstanding commitment of both of these agencies to environmental excellence and the protection of human health. Lessons learned from the Hudson River remediation project will also be discussed.

Panelists:
George Rusk, Vice President, Ecology & Environment, Inc.
John Morris, P.E., Global Remediation Director, Honeywell

3:25 PM **Networking Break**

3:35 PM **Insurance Coverage Implications**
This discussion will cover key coverage issues that arise under legacy primary and excess CGL policies at mega- superfund sites, including: "Expected or intended" and related "known loss" Issues, pollution Exclusion Issues, Timing of PD, Allocation v. "all sums", Number of occurrences (big issue), Non-cumulation clauses and "stacking" issues, Contribution claims among insurers; claim bar orders

Panelists:
Aidan M. McCormack, Partner, DLA Piper LLP
Peter Mintzer, Partner, Selman Breitman
Lind Stapley, Shareholder, Soha & Lang, P.S.
Adam Krauss, Partner, Traub Lieberman Straus & Shrewsberry LLP
Eliot R. Hudson, Senior Counsel, DLA Piper LLP
Frank Cordell, Partner, Gordon Tilden Thomas Cordell LLP

4:35 PM **Final Questions, Wrap Up, Adjourn to Networking Reception**

6:00 PM **Symposium Ends**

Message

From: Amy S. Plaster [AMY.PLASTER@cmsenergy.com]
Sent: 11/9/2017 10:03:26 PM
To: Kelly, Albert [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=08576e43795149e5a3f9669726dd044c-Kelly, Albe]
Subject: RE: CMS Meeting on Superfund Site/Visit to Pumped Hydro Storage Facility

Thank you so much for e-mailing again! I just finished 2 days of running around the Hill with our tax guy on the House bill. Very successful, but I neglected to reply to you promptly! I appreciate you reminding me. I would like to get you on the phone with Gary Kelterborn, our in-house counsel who has been working on this matter since its initiation. He is not available unfortunately until Monday. Is there any chance you would be available Monday at 4pm? If not, 9:30am or 10am may work as well. Thank you again and look forward to talking with you. Amy

Amy Plaster
CMS Energy
Ex. 6 (O)
(C)

From: Kelly, Albert [mailto:kelly.albert@epa.gov]
Sent: Thursday, November 9, 2017 4:25 PM
To: Amy S. Plaster
Subject: RE: CMS Meeting on Superfund Site/Visit to Pumped Hydro Storage Facility

Hello Amy. Just following up. Do you have any time that you would like to have a discussion?

Albert Kelly
Senior Advisor to the Administrator
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Ex. 6

From: Amy S. Plaster [mailto:AMY.PLASTER@cmsenergy.com]
Sent: Monday, November 6, 2017 4:40 PM
To: Kelly, Albert <kelly.albert@epa.gov>
Subject: RE: CMS Meeting on Superfund Site/Visit to Pumped Hydro Storage Facility

Thank you for the quick reply. I would like to arrange a call with our internal counsel on the matter. Would you be amenable to that? If so, would later this week or early next? Thank you! Amy

Amy Plaster
CMS Energy
Ex. 6 (O)
(C)

From: Kelly, Albert [mailto:kelly.albert@epa.gov]
Sent: Monday, November 6, 2017 4:29 PM
To: Amy S. Plaster; Bolen, Brittany
Cc: Fisher, Emily; Kiran L. Malone; Dravis, Samantha
Subject: RE: CMS Meeting on Superfund Site/Visit to Pumped Hydro Storage Facility

Hello Amy, I look forward to discussing with you. When is a convenient time?

Albert Kelly
Senior Advisor to the Administrator
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Ex. 6

From: Amy S. Plaster [mailto:AMY.PLASTER@cmsenergy.com]
Sent: Monday, November 6, 2017 4:13 PM
To: Bolen, Brittany <bolen.brittany@epa.gov>
Cc: Fisher, Emily <EFisher@eei.org>; Kiran L. Malone <Kiran.Malone@cmsenergy.com>; Kelly, Albert <kelly.albert@epa.gov>; Dravis, Samantha <dravis.samantha@epa.gov>
Subject: RE: CMS Meeting on Superfund Site/Visit to Pumped Hydro Storage Facility

Thank you Brittany! Kel, I look forward to touching base on the Bay Harbor issue. Please let me know how best to proceed.

Samantha, who should we be in touch with about the offer for a site visit to our Ludington Pumped Storage facility? Thanks! Amy

Amy Plaster
CMS Energy
Ex. 6 (O)
(C)

From: Bolen, Brittany [mailto:bolen.brittany@epa.gov]
Sent: Monday, November 6, 2017 4:10 PM
To: Amy S. Plaster
Cc: Fisher, Emily; Kiran L. Malone; Kelly, Albert; Dravis, Samantha
Subject: Re: CMS Meeting on Superfund Site/Visit to Pumped Hydro Storage Facility

Hi Amy, and Emily -
Thank you for your email. I am connecting you with my colleague, Albert "Kel" Kelly (cc'd), who leads the Administrator's Superfund Task Force and is your best point of contact on these issues.
Best,
Brittany

On Nov 2, 2017, at 9:56 PM, Amy S. Plaster <AMY.PLASTER@cmsenergy.com> wrote:

> Thank you for the e-mail and introduction, Emily. Brittany, we would appreciate an opportunity to touch base on these two items. Thanks! Amy
>
> Amy Plaster
> CMS Energy
> Ex. 6 (O)
> (C)

From: Fisher, Emily [mailto:EFisher@eei.org]
Sent: Thursday, November 2, 2017 11:47 AM
To: Bolen.brittany@epa.gov
Cc: Amy S. Plaster; Kiran L. Malone
Subject: CMS Meeting on Superfund Site/Visit to Pumped Hydro Storage Facility

Good morning, Brittany,

EEI appreciated Samantha Dravis's participation in our External Affairs conference last week. During her remarks, she highlighted, among other things, the Administrator's interest in Superfund Sites and his interest in visiting energy infrastructure in the U.S. EEI member CMS, which is located in Michigan, would appreciate the opportunity to talk to you about a Superfund Site issue in Michigan and would like to extend an invitation to EPA to visit their pumped hydro storage facility. I've copied Amy Plaster and Kiran Malone from CMS's Washington office on this e-mail so that they can continue this conversation with you and answer any questions that you may have. Thank you.

Best regards,

Emily Fisher

Emily Sanford Fisher
Vice President, Law
Corporate Secretary
701 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2696

Ex. 6

www.eei.org

Follow EEI on Twitter, Facebook, and YouTube.

<image001.jpg>

Message

From: Barbara J. Goldsmith [bjg@nrdonline.org]
Sent: 8/11/2017 9:29:52 PM
To: Kelly, Albert [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=08576e43795149e5a3f9669726dd044c-Kelly, Albe]
CC: Falvo, Nicholas [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=424ac90ea7d8494a93209d14d37f2946-Falvo, Nich]
Subject: Following Up -- Request to Participate as Speaker and Block October 24, 2017

Hello — I am just following up to make sure that you received this invitation and I hope that you can join us. The agenda and all speakers are in the process of being finalized and since writing (below), we have modified the Workshop title to "Blueprint for Change: New Approaches to Managing Natural Resource Risks, Liabilities and Opportunities". We view that the ongoing work of the Superfund Task Force is highly relevant. I am happy to answer questions and if necessary, we can show you as invited or tentative on the agenda if you are not yet able to commit to the date/time. I look forward tor hearing from you and send best regards. Barbara

---

From: Barbara J. Goldsmith <bjg@nrdonline.org>
Date: Monday, June 26, 2017 at 8:36 AM
To: <kelly.albert@epa.gov>
Subject: Request to Participate as Speaker and Block October 24, 2017

Dear Mr. Kelly (Albert)—

I hope this message finds you well! I enjoyed our telephone conversation several weeks back concerning Superfund and its intersection with natural resource damages and look forward to working with you and others at EPA as you continue to develop and implement specific recommendations.

I am writing today to invite your participation in a program to be held in Washington, DC on **Tuesday, October 24, 2017**. On this date, the Ad-Hoc Industry Natural Resource Management Group (Group) will hold a Specialty Workshop at, and in cooperation with, **The George Washington University** (and possibly other sponsors as well). The all-day Workshop is currently captioned "Profiles in Innovation: Managing Natural Resource Risks, Liabilities and Opportunities".

Though the agenda is still being finalized, we would like to invite you to deliver the **Luncheon Address — tentatively set for 12:00 PM.** We have tentatively titled the address "Evaluating EPA's Superfund Program: Challenges, Revelations, Progress" but are open to the address captioning of your choice. The Workshop will explore current influencers (risk, carbon pricing, regulatory reform, etc.) and underpinnings (regulatory, legislative, methodological, other) of natural resource-related matters and related issues (including remediation of Superfund sites) of interest to companies and other stakeholders now and moving forward. We hope to feature a few innovative case histories as well. More details to come.

For now, I am hoping that you can confirm your potential availability to join us for this program and block the October 24, 2017 date. The Group's member companies and affiliate firms have a long history of working collaboratively with government, universities, and others and this Workshop is consistent with our ongoing work to facilitate a reasonable, balanced and predictable practice arena.

I look forward to your reply and thank you for considering this invitation!

Kind regards,
Barbara Goldsmith

Barbara J. Goldsmith
President, Barbara J. Goldsmith & Company
Executive Director, Ad-Hoc Industry Natural Resource Management Group
Washington Ex. 6
Brussels Ex. 6
Mobile Ex. 6
BJG@bjgco.com or BJG@nrdonline.org
www.bjgco.com
www.nrdonline.org

Message

From: Benjamin E. Quayle [bquayle@hhqventures.com]
Sent: 8/16/2017 10:42:41 PM
To: Kelly, Albert [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=08576e43795149e5a3f9669726dd044c-Kelly, Albe]
Subject: Memo regarding issues with AOC
Attachments: Memo Regarding Issues with AOC.docx

Mr. Kelly,

Attached please find a memo regarding the outstanding issues Troy Corp has with the Administrative Order on Consent they received from Region 2. Additionally, as you might be aware, Region 2 gave Troy a deadline of September 6th to sign the AOC or the Region would pursue alternative enforcement mechanisms.

Considering this quickly approaching deadline, Troy would respectfully request a deadline extension of between 60 and 90 days so it could continue to work with EPA to resolve the issues discussed in the attached document.

Troy is ready and willing to resolve and remediate its site and looks forward to working with EPA on these issues.

Please feel free to contact me with any questions.

Best,

Ben Quayle

Hon. Ben Quayle
Partner
HHQ Ventures, LLC
M: Ex. 6

HOBART HALLAWAY & QUAYLE VENTURES, LLC

MEMORANDUM

To:	**Albert "Kell" Kelly**
From:	**HHQ Ventures, LLC**
Re:	**Summary of Troy's Principal Issues with EPA Region 2's Proposed Administrative Order on Consent for the Remedial Investigation of the Troy Plant Site**
Date:	**August 16, 2017**

On August 7, Troy received a certified letter dated July 28, 2017 from EPA Region 2 that included a proposed Administrative Order on Consent ("AOC") and Statement of Work ("SOW"). The SOW largely reflects the results of discussions between Region 2 and Troy. It acknowledges the extensive work that has been done by Troy and its technical consultants over the last 25 years in characterizing the Troy Chemical Corporation Plant Site and evaluating remedial options. Troy is optimistic its technical consultants can work with the EPA project manager to resolve remaining issues and agree on a SOW acceptable to both Troy and EPA.

Unfortunately, the AOC still largely relies on EPA boilerplate, rather than reflecting the more stream-lined process outlined in the SOW. The AOC is not consistent with the SOW in that it can be read to require a standard Remedial Investigation and Feasibility Study ("RI/FS"), rather than the streamlined approach that is embodied in the SOW. In addition, Region 2 has omitted revisions suggested by Troy to arrive at a fair, efficient and effective Agreement. Troy's principal concerns with the AOC are as follows:

- **Consistency with the Statement of Work:** The AOC contains standard language used by Region 2 regarding work to be performed. The Region 2 attorney assigned to the project states that her hands are bound by forms mandated by EPA Headquarters. This includes language requiring investigation of contamination "at or from" the property and requires adherence to a "standard RI/FS guidance" as well as the SOW. In this respect, the AOC incorporates documents that impose requirements inconsistent with the SOW. The EPA should make clear that the principal document governing work to be performed is the SOW and that the SOW controls.

- **Work under the AOC should be limited to OU 2:** EPA Region 2 personnel, including current Acting Deputy Administrator (Mr. Mugdan), and Troy have discussed Troy's interest in remediating the Troy plant site with the objective of having it delisted from the National Priority List ("NPL"). For this reason, the EPA has designated the Troy plant as OU 2 and the SOW calls for work limited to that area. The AOC calls for investigation of contamination "from the Property". This would be off-site work not included in the SOW. Such work should be addressed as part of OU 1 and should be excluded from the AOC for OU 2.

- **Additional Work:** The AOC includes standard language authorizing EPA to order additional work at any point. EPA rejected Troy's suggestion to authorize additional work, "based on new environmental data that was not known . . . when the work plan was approved." Under the circumstances of this site, the limitation is appropriate. It is important to Troy to know that EPA will stand by the SOW unless new data require it be changed. During a meeting between Troy and EPA on September 20, 2016, Walter Mugdan, then the Director of the Region 2 Superfund office, agreed that Troy should have some assurance as to what it is obligating itself to do and agreed to pursue an approach tailored to the Troy plant site and the extensive work previously done.

- **EPA Oversight of Offsite Waste Shipments:** Under the proposed AOC, Region 2 will oversee all offsite waste shipment. This is a problem for Troy. It regularly generates waste, including hazardous waste, from its operations. That waste is handled in accordance with all applicable regulations. EPA oversight of waste from operations of our manufacturing plant is inappropriate and unnecessary. Troy suggested limiting EPA oversight of off-site waste shipment to wastes *generated by the remediation work,* but EPA rejected that suggestion and provided no explanation for its decision.

- **Findings of Fact:** The proposed AOC only discusses historic contamination that originated on the Troy plant site. EPA is aware that the principal contaminated area is a drainage ditch which was formerly part of the City of Newark industrial and storm water system. Waste from upgradient industrial facilities as well as from activities from former entities are present in the ditch (this site has a hundred-year history of industrial and municipal use that precedes the current Troy Chemical use which began on June 30, 1980) at what is now the Troy plant site. EPA has refused suggested language explaining this factual background. If EPA will not revise the facts, the AOC should include text acknowledging that Troy does not accept EPA's Findings of Facts. This issue is important to Troy to avoid public misperception of the nature of the contamination at Troy's plant site.

- **Stipulated Penalties:** EPA rejected Troy's suggestion that stipulated penalties based on an alleged violation of the AOC should not begin to accrue until EPA has notified Troy of the violation. Thus, under EPA's proposed language, the stipulated penalties will begin to accrue regardless of whether EPA has notified Troy and given it opportunity to remedy the issue. This means that EPA can identify what it believes is non-compliance, wait for an indeterminate time, and then serve Troy a bill for penalties that have accrued over the that period and which subsequently further accrue. Troy views requiring notice of an alleged non-compliance as ***a simple matter of due process*** that should not be controversial.

- **EPA review times**: Region 2 rejected the suggestion that EPA agree to use best efforts to complete its review of Respondent's submissions within thirty (30) days of submission. Region 2 should be willing to commit to nonbinding targets for review of deliverables, as this will help keep the project moving forward expeditiously.

- **Protection of Confidential Information:** Region 2 rejected Troy's suggestions concerning EPA's responsibility to protect confidential business information. As this is an operating chemical plant with controlled access and many confidential trade secret processes, assurance of confidentiality is important.

- **Limitation of Oversight Costs:** Administrator Pruitt's Superfund Task Force's July 25 Report and Recommendations ("Task Force Report") includes a recommendation that cooperating parties doing quality work should be subject to reduced oversight costs, including overhead. Troy requests Region 2 include such a provision in this AOC.

- **The Troy Newark Plant represents an opportunity to implement recommendations from the Superfund Task Force Report and demonstrate that they are effective**. Troy is ready, willing and able to perform the work needed to finalize a remedy for its Newark manufacturing plant and to implement that remedy promptly. Troy respectfully requests EPA Headquarters work with it to develop a new approach to Agreements between cooperating parties and EPA. A revised approach could further the objectives of the Superfund Task Force Report. Specifically, a revised Order framework could incorporate and advance:

    - Recommendation 1: Establish project timelines. (Troy has asked Region 2 to commit to a review schedule that includes target periods for EPA review, but it has refused);
    - Recommendation 5: Clarify priorities for RI/FS Resources. (In the SOW, EPA acknowledges that RI/FS field work is substantially complete for OU 2 based upon Troy's prior work);
    - Recommendation 16: Provide financial incentives in the form of reduced oversight to PRPs who perform timely work (requested above); and
    - Recommendation 21: Integration of site redevelopment into cleanup (the approach embodied in the SOW is intended to ensure that its existing operating facility will continue to operate).

    The remediation of Troy's site can serve as a model to demonstrate the ability to speed remedy selection and implementation and achieve the principal objectives of the Task Force Report.

Message

From: Benjamin E. Quayle [bquayle@hhqventures.com]
Sent: 8/2/2017 4:21:17 PM
To: Kelly, Albert [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=08576e43795149e5a3f9669726dd044c-Kelly, Albe]
Subject: Re: Superfund Task Force Report--Troy Corp

Yes. Please let me know what time works for you. Thanks.

Sent from my iPhone

On Aug 2, 2017, at 10:00 AM, Kelly, Albert <kelly.albert@epa.gov> wrote:

> Thank you Congressman, would you have time for a call later this afternoon?
>
> Albert Kelly
> Senior Advisor to the Administrator
> 1200 Pennsylvania Avenue, NW
> Washington, DC 20460
> **Ex. 6**
>
> **From:** Benjamin E. Quayle [mailto:bquayle@hhqventures.com]
> **Sent:** Wednesday, August 2, 2017 11:44 AM
> **To:** Kelly, Albert <kelly.albert@epa.gov>; Falvo, Nicholas <falvo.nicholas@epa.gov>
> **Cc:** Rashid G. Hallaway <rhallaway@hhqventures.com>; Dewey, Amy <Dewey.Amy@epa.gov>
> **Subject:** Superfund Task Force Report--Troy Corp
>
> Albert/Nick,
>
> Congratulations on completing the Superfund Task Report. I am eager to see the report's recommendations implemented soon.
>
> In that regard, we reviewed the Report and noticed that several recommendations in the Task Force Report support allowing Troy to proceed quickly to final remedy selection. Some of the recommendations and how it fits into Troy's plan are noted below.
>
> - <!--[if !supportLists]--><!--[endif]-->Recommendation 1: Establish metrics on all sites to track progress, including PRP lead, length of time to estimated partial or complete deletion, costs anticipated, etc.; Develop project timelines and exit strategies; and, track and report progress on achieving/meeting timelines.
>
> - <!--[if !supportLists]--><!--[endif]-->***Troy has requested that Region 2 agree to an expedited schedule to achieve remedy selection and implementation.***
>
> - <!--[if !supportLists]--><!--[endif]-->Recommendation 5: Clarify Priorities for RI/FS Resources.
>
> - <!--[if !supportLists]--><!--[endif]-->***Troy believes sufficient information exists to develop a complete RI/FS without significant additional work. Additional data requested by USEPA Region 2 is not likely to change the outcome.***

- <!--[if !supportLists]--><!--[endif]-->Recommendation 16: Develop a plan to provide financial incentives in the form of reduced oversight to PRPs who perform timely, quality work under an agreement by reducing the costs associated with EPA's oversight, including adjustments to indirect costs. Establish and promote strict adherence to project deadlines.

    - <!--[if !supportLists]--><!--[endif]-->***Troy has proposed a schedule to Region 2 that includes deadlines applicable to all parties.***

- <!--[if !supportLists]--><!--[endif]-->Recommendation 21: Facilitate site redevelopment during cleanup by encouraging PRPs to fully integrate and implement reuse opportunities into investigations and cleanups of NPL sites.

    - <!--[if !supportLists]--><!--[endif]-->***Troy's approach to the investigation and remediation of its Newark site will allow for the continuation and expansion of chemical manufacturing operations. Other approaches, even if possible, would jeopardize these operations.***

Troy is prepared to address contamination pursuant to the cost-effective approach contemplated by the Task Force Report. We appreciate your work on these matters and look forward to working with the EPA to remedy the issues at Troy's site. Please let me or Rashid know if you have any questions or comments.

Best,

Ben Quayle

Hon. Ben Quayle
Partner
HHQ Ventures, LLC
M: **Ex. 6**

Message

From: Barbara J. Goldsmith [bjg@nrdonline.org]
Sent: 5/25/2017 8:19:20 PM
To: Kelly, Albert [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=08576e43795149e5a3f9669726dd044c-Kelly, Albe]
Subject: Regulatory Reform -- Comments to US EPA
Attachments: Input of Ad-Hoc Industry Natural Resource Managemnt Group to EPA RRO_May 15 2017.pdf

Dear Mr. Kelly —

I am forwarding — for your information — the comments I submitted to Samantha Dravis on May 17. We look forward to engaging with US EPA as it proceeds with its important work on regulatory reform — and the allied initiative Prioritizing the Superfund Program. I hope that you and your colleagues will feel free to reach out to me if I can be helpful relative to these efforts.

Best,
Barbara Goldsmith

From: Barbara J. Goldsmith <bjg@bjgco.com> on behalf of Barbara Goldsmith <bjg@nrdonline.org>
Date: Monday, May 15, 2017 at 3:01 PM
To: <Laws-Regs@epa.gov>
Cc: <dravis.samantha@epa.gov>
Subject: Regulatory Reform -- Comments to US EPA

Dear Ms. Dravis —

I am pleased to provide the attached comments of the Ad-Hoc Industry Natural Resource Management Group ("Group") as input to US EPA's Regulatory Reform activities in accordance with Executive Order 13777.

Kind regards,
Barbara Goldsmith

Barbara J. Goldsmith
President, Barbara J. Goldsmith & Company
Executive Director, Ad-Hoc Industry Natural Resource Management Group
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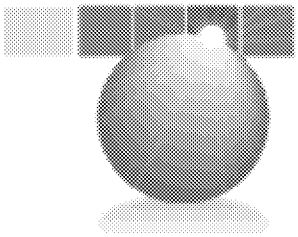

May 15, 2017

MEMORANDUM

TO: Samantha Dravis, Esq.
Regulatory Reform Officer, United States Environmental Protection Agency

FROM: Barbara J. Goldsmith
Executive Director, Ad-Hoc Industry Natural Resource Management Group

RE: Request for Review -- The Inter-Relationship Between EPA Policies and Regulations and the Natural Resource Damage Assessment Regulations of the US Department of the Interior (43 CFR Part 11) and NOAA (990 CFR Part 15)

Summary of Requested Action

Since many of the nation's hazardous waste sites involve Natural Resource Damage (NRD) issues, there are potential opportunities to create a more cost-effective way to approach natural resources damages at Superfund sites. While EPA's responsibility relative to NRD is limited (with the notable exception of its role as trustee in the Deepwater Horizon Natural Resource Damage Assessment), in practice, cleanup and NRD are often tied together, notably related to data -- and in some cases, synergies between remedial actions and restoration projects (with both positive and negative outcomes). Since there are problems with the Interior and NOAA regulations (highlighted below), we believe that review of the Interior and NOAA regulations should also include a review of the interface with EPA regulations and policies to identify possible actions that could result in a more effective overall practice via regulatory or other changes.

Introduction and Purpose of Memorandum

This memorandum is written on behalf of the companies that make up the nearly 30 year old Ad-Hoc Industry Natural Resource Management Group ("Group"). This unique group of major multinational companies is singularly focused on the interface between natural resources (air, water, land, biota) and industrial, energy and transportation activities. We have been the key industry group engaged with all five Federal Government "trustee" Departments and Agencies. In addition to providing comments on relevant US DOI and NOAA NRDA rulemakings over the years, we have had in place (since 1999) mechanisms to permit ongoing communication and practice exchange and we have more recently launched cooperative database and other initiatives -- all aimed at encouraging a reasonable, balanced, and predictable practice arena.

While there have certainly been advances in NRD practice over the years, we are at a critical juncture following the unprecedented effort expended by private and public sectors alike to assess and settle natural resource damages related to the Deepwater Horizon incident. This provides an ideal time to assess what is and is not working and the

c/o Barbara J. Goldsmith & Company
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Email: info@NRDonline.org • Web: www.NRDonline.org

role that the current Interior and NOAA regulations play in this. We are heartened by the President's current efforts to examine those regulations that may be a candidate for change or replacement or repeal. It is our view that the Interior regulations at 43 CFR Part 11 and NOAA Regulations at 990 CFR Part 15 are appropriate candidates for Regulatory Task Force review by those agencies per the President's Executive Order 13777. Further, it is our view that these reviews might entail examination of the interface with EPA (and Coast Guard too) to identify possible opportunities and needs via regulation or otherwise. More effective NRDA regulations to remedy current problems and/or alternate (non-regulatory) approaches to assessing and settling natural resource damage issues could result in faster and more cost-effective cleanups.

Synopsis of Regulation

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or "Superfund") provides that responsible parties for releases of hazardous substances are liable, in addition to cleanup, for "damages for injury to, destruction of, or loss of natural resources" caused by their releases (CERCLA § 107(a)(C)) – referred to as natural resource damages (NRD). It provides further that NRD recovered may be used "only to restore, replace, or acquire the equivalent of [the injured] natural resources" (*id.* § 107(f)(1)). Similarly, the Oil Pollution Act of 1990 (OPA) provides for the recovery of NRD for discharges of oil (OPA § 1006). Under both statutes, NRD are assessed and recovered by federal, state, and/or Indian tribal trustees for the natural resources affected. Two sets of regulations have been issued to govern the NRD assessment process – those promulgated by the Department of the Interior (DOI) under CERCLA pertaining to hazardous substance releases (43 CFR Part 11) and those promulgated by the National Oceanic and Atmospheric Administration (NOAA) under OPA pertaining to oil discharges (15 CFR Part 990). Use of the regulations is optional per CERCLA and OPA; however, if a trustee uses the regulations, its NRD assessment is entitled to a rebuttable presumption in its favor in a judicial action to recover the NRD. However, despite the optional nature of the regulations, they form, in most cases, the basis of -- or the benchmark for – assessments, in whole or part, which are then used to settle cases. Thus, the practical effect of the regulations' importance cannot be minimized.

Effects of the NRDA Regulations

There are a number of problems with the Interior regulations and their implementation by the Department acting as "trustee" (for natural resources as defined under CERCLA) that make the assessment process inefficient, ineffective, and unduly contentious, lead to unreasonably large and unbounded claims for NRD, and hinder prompt and cost-effective restoration of the affected natural resources. Some of these problems are similarly present via the NOAA regulations. These problems include the following:

1. While the regulations set forth a step-wise process for assessment and more recently focus on projects to restore injured natural resources, the NRD assessment process prescribed by the regulations is complicated and cumbersome and often leads to excessive delays in settlement and/or in restoring natural resources. Moreover, there are no cost or time limits imposed by the regulations. Trustees often spend many years – sometimes decades – conducting endless studies of the resources without restoring them.

2. In determining the natural resource injuries that are compensable in NRD, trustees sometimes improperly include impacts that have occurred over time but were not caused by responsible parties' releases, such as those resulting from naturally occurring substances/conditions, general industrial development, other sources, and permitted discharges.

3. Given the broad definitions of injuries, especially in the DOI regulations, trustees often include effects that have not caused any actual or demonstrable harm to the environment or to services provided by the resources to the public – such as impacts to groundwater that is not used by anyone, effects on individual biological organisms that have not been shown to affect local populations of the plants or animals, effects

shown only in laboratory studies or at other sites and not at the actual site involved, effects derived from speculative injury models, etc.

4. While the regulations provide for NRD to include the cost of restoring the damaged resources (called "primary restoration"), they also allow recovery of NRD based on the asserted value of the interim loss of the resources or their services prior to primary restoration (called "compensable value" in the DOI regulations). They allow trustees to estimate that value through a variety of techniques, some of which are highly speculative, including techniques for attempting to estimate "non-use" value (value that the public may derive from the existence of a resource without using it, which is notoriously difficult to measure). This can lead trustees to seek the largest monetary damage payment their experts can devise, rather than seeking to implement the most cost-effective projects that can promptly restore the resources.

Better or Different Regulations Needed

Given problems such as those cited above, the NRD regulations meet the criteria of Section 3(d) of Executive Order 13777 (Enforcing the Regulatory Reform Agenda, Feb. 24, 2017) for regulations that an agency's Regulatory Reform Task Force should identify for potential repeal, replacement, or modification. Those criteria include regulations that are "outdated, unnecessary, or ineffective." This is clearly true of the NRD assessment regulations.

Specific Issues Needing Task Force Review

The Group is separately writing to the US Departments of the Interior and Commerce to request that the NRD assessment regulations and related implementation protocols be reviewed and revised to impose logical boundaries on the NRD assessment process. Such action would prevent or minimize the current potential for lengthy studies and unconstrained damage claims and lead to more expeditious and cost-effective restoration of affected resources. These reviews should incorporate review of the trustee/EPA interface to identify opportunities for improved regulatory effectiveness on remedial and NRD sides, recognizing the synergies inherent in the two programs.

Closing

The Group is prepared to provide case histories and data to aid US EPA's Regulatory Task Force review of the interface with NRD issues when it addresses US EPA regulations that are candidates for modification, replacement or repeal.

We would be happy to answer any questions you may have and/or meet with the Task Force as desired. I may be reached at Ex. 6 or by email at bjg@nrdonline.org.

Respectfully,

Barbara Goldsmith

FOR: Ad-Hoc Industry Natural Resource Management Group

Note: Nothing in this memorandum should be construed as representing the views of any individual member company of the Ad-Hoc Industry Natural Resource Management Group.

Message

From: Barbara J. Goldsmith [bjg@nrdonline.org]
Sent: 6/6/2017 8:24:15 PM
To: Kelly, Albert [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=08576e43795149e5a3f9669726dd044c-Kelly, Albe]
CC: Falvo, Nicholas [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=424ac90ea7d8494a93209d14d37f2946-Falvo, Nich]
Subject: Following Up on Today's Conference Call
Attachments: Input of Ad-Hoc Industry Natural Resource Management Group to EPA RRO_May 15 2017.pdf; Input of Ad-Hoc Industry Natural Resource Management Group to DOC RRO_May 17 2017.pdf; Input of Ad-Hoc Industry Natural Resource Management Group to DOI RRO_May 17, 2027.pdf; The Relationship Between Cleanup and Restoration...Draft for Discussion (August 2016).pdf

Dear Mr. Kelly (Albert) —

It was a pleasure to speak with you this morning. Per our conversation, I am attaching copies of the May 17 memoranda I sent to the RROs of the Departments of Commerce and Interior. I have also re-attached here (for easy access so everything is in one place) the May 15 memorandum to Samantha Dravis previously provided to you. Also attached is the "protocol" I referred to during our discussion. I hope that it can be helpful and we are prepared to further develop the ideas contained in this document — titled "The Relationship Between Clean Up (at Superfund and Other Hazardous Waste Sites) and Restoration off Natural Resources: A Best Practice Approach for Industrial Companies and Others". We have intentionally kept this document as a "Draft for Discussion" to encourage dialogue and a robust exchange of ideas.

As noted today, a mechanism to permit consistent (and meaningful) upfront identification and agreement among the parties relative to available options/approaches for handling the remediation/NRD interface when appropriate would be a very positive step forward in my view — as well as identifying and removing any unnecessary "inhibiters" to achieving cost-effective and expeditious remediation and natural resource restoration when both are at play (or potentially at play) with respect to a specific site.

I am happy to answer questions, provide additional information, review draft documents, or meet in person if it can help to advance the objectives of the Superfund Prioritization mandate and associated Task Force. I will look forward to hearing from you and/or your colleagues and wish you the best of luck in preparing your initial "30 day" set of recommendations. This is an important and potentially game changing activity and I applaud it.

Kind regards,
Barbara

Barbara J. Goldsmith
President, Barbara J. Goldsmith & Company
Executive Director, Ad-Hoc Industry Natural Resource Management Group
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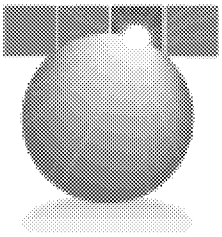

Ad-Hoc INDUSTRY

NATURAL RESOURCE MANAGEMENT GROUP

May 17, 2017

MEMORANDUM

TO: James Uthmeier, Esquire
Chair, Regulatory Task Force, United States Department of Commerce

FROM: Barbara J. Goldsmith
Executive Director, Ad-Hoc Industry Natural Resource Management Group

RE: The Need to Include the NOAA Natural Resource Damage Assessment Regulations (990 CFR Part 15) in the List of Commerce's Regulations to be Reviewed for Modification, Replacement or Repeal

---

Summary of Requested Action

The Department of Commerce/National Oceanic and Atmospheric Administration (NOAA) Natural Resource Damage (NRD) Assessment regulations need to be modified or replaced. Since 1980, there have been over 850 documented NRD cases involving nearly 1000 settlements totaling $17 billion.[1] Individually and collectively, US-based companies have had to expend huge amounts in transaction costs as cases have stalled and then must pay NOAA for the work performed (with no set time or cost limits) to assess NRD at specific sites. *Any federal regulatory program that has resolution of NRD taking decades in some cases and/or is holding large amounts in the US Treasury because collection of funds from businesses has outpaced the Department's ability to spend funds collected to restore "injured" natural resources is a strong candidate for regulatory reform review.* **We respectfully request that the Department of Commerce/NOAA NRD assessment regulations be added to the list of regulations to be reviewed by the Department's Regulatory Task Force.**

Introduction and Purpose of Memorandum

This memorandum is written on behalf of the companies that make up the nearly 30-year-old Ad-Hoc Industry Natural Resource Management Group (Group). This unique group of major multinational companies is singularly focused on the interface between natural resources (air, water, land, biota) and industrial, energy and transportation activities. We have been the key industry group engaged with NOAA since it first proposed in 1994 NRD Assessment regulations governing discharges of oil into navigable waters as required under the Oil Pollution Act. The Group has enjoyed a positive relationship with

[1] Source: Ad-Hoc Industry Natural Resource Management Group Database. This proprietary database has catalogued the details of every NRD case since 1980 and likely comprises the most comprehensive information anywhere in the country on NRD liability and related issues.

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1101 Pennsylvania Avenue NW, Suite 600, Washington DC 20004-2544 • Tel: 202-628-6818 Fax: 202-628-6825
Rond Point Schuman, 6 - Box 5, 1040 Brussels, Belgium • Tel: +32(0)2 234 6390 Fax: +32(0)2 234 7911
Email: info@NRDonline.org • Web: www.NRDonline.org

NOAA. In addition to providing comments on every proposed rulemaking as they have come up, we also set up mechanisms for ongoing communication and practice exchange and have more recently launched cooperative initiatives with NOAA and other key Federal Government Departments -- all aimed at encouraging a reasonable, balanced, and predictable practice arena.

While there have certainly been advances over the years, we are at a critical juncture following the unprecedented effort expended by private and public sectors alike to assess and settle natural resource damages related to the Deepwater Horizon incident. This provides an ideal time to assess what is and is not working and the role that the NOAA regulations play in this.[2] We are heartened by the President's current efforts to examine those regulations that may be a candidate for change or replacement or repeal. **It is our view that NOAA's NRD regulations at 990 CFR Part 15 are an appropriate candidate for Regulatory Task Force review per the President's Executive Orders.** We are simultaneously suggesting to the Department of Interior Regulatory Task Force that they examine the NRD assessment regulations at 43 CFR Part 11 promulgated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund). In fact, the very existence of two sets of federal regulations may in itself create the kind of inefficiencies that the President's Executive Orders are seeking to avoid. NOAA's regulations were last updated in 2002 and DOI's in 2008.

The remainder of this memorandum highlights key areas of needed change and how alternate approaches could result in a more cost-effective approach to assessing natural resource injuries, reaching settlement, and restoring the services attendant to natural resources affected by a release of hazardous waste or oil.

Synopsis of Regulation

CERCLA provides that responsible parties for releases of hazardous substances are liable, in addition to cleanup, for "damages for injury to, destruction of, or loss of natural resources" caused by their releases (CERCLA § 107(a)(C)) – referred to as NRD. It provides further that NRD recovered may be used "only to restore, replace, or acquire the equivalent of [the injured] natural resources" (*id.* § 107(f)(1)). Similarly, OPA provides for the recovery of NRD for discharges of oil (OPA § 1006). Under both statutes, NRD are assessed and recovered by federal, state, and/or Indian tribal trustees for the natural resources affected. Two sets of regulations have been issued to govern the NRD assessment process – those promulgated by DOI under CERCLA pertaining to hazardous substance releases (43 CFR Part 11) and those promulgated by NOAA under OPA pertaining to oil discharges (15 CFR Part 990). Use of the regulations is optional per CERCLA and OPA; however, if a trustee uses the regulations, its NRD assessment is entitled to a rebuttable presumption in its favor in a judicial action to recover the NRD. However, despite the optional nature of the regulations, they form, in most cases, the basis of -- or the benchmark for – assessments, in whole or part, which are then used to settle cases. Thus, the practical effect of the regulations' importance cannot be minimized.

Effects of the NRDA Regulations

There are a number of problems with the Interior and NOAA regulations and their implementation by the Department of Interior and NOAA, respectively, acting as "trustee" (for natural resources as defined under CERCLA and OPA, respectively) that make the assessment process inefficient, ineffective, and

[2] NOAA's review of its NRDA regulations should incorporate review of the trustee/US Environmental Protection Agency (EPA) interface to identify opportunities for improved regulatory effectiveness on remedial and NRD sides, recognizing the synergies inherent in the two programs. Likewise, we are requesting that NOAA incorporate review of the trustee/US Coast Guard interface.

unduly contentious, lead to unreasonably large and unbounded claims for NRD, and hinder prompt and cost-effective restoration of the affected natural resources. These problems include the following:

1. While both sets of regulations set forth a step-wise process for assessment and more recently focus on projects to restore injured natural resources, the NRD assessment process prescribed by the regulations, particularly the Interior regulations, is complicated and cumbersome and often leads to excessive delays in settlement and/or in restoring natural resources. Moreover, there are no cost or time limits imposed by the regulations. Trustees often spend many years – sometimes decades – conducting endless studies of the resources without restoring them.

2. In determining the natural resource injuries that are compensable in NRD, trustees sometimes improperly include impacts that have occurred over time but were not caused by responsible parties' releases, such as those resulting from naturally occurring substances/conditions, general industrial development, other sources, and permitted discharges.

3. Given the broad definitions of injuries, especially in the DOI regulations, trustees often include effects that have not caused any actual or demonstrable harm to the environment or to services provided by the resources to the public – such as impacts to groundwater that is not used by anyone, effects on individual biological organisms that have not been shown to affect local populations of the plants or animals, effects shown only in laboratory studies or at other sites and not at the actual site involved, effects derived from speculative injury models, etc.

4. While the regulations provide for NRD to include the cost of restoring the damaged resources (called "primary restoration"), they also allow recovery of NRD based on the asserted value of the interim loss of the resources or their services prior to primary restoration (called "compensable value" in the DOI regulations ad "compensatory restoration in the NOAA regulations). They allow trustees to estimate that value through a variety of techniques, some of which are highly speculative, including techniques for attempting to estimate "non-use" value (value that the public may derive from the existence of a resource without using it, which is notoriously difficult to measure). This can lead trustees to seek the largest monetary damage payment their experts can devise, rather than seeking to implement the most cost-effective projects that can promptly restore the resources.

Better or Different Regulations Needed

Given problems such as those cited above, the NRD regulations meet the criteria of Section 3(d) of Executive Order 13777 (Enforcing the Regulatory Reform Agenda, Feb. 24, 2017) for regulations that an agency's Regulatory Reform Task Force should identify for potential repeal, replacement, or modification. Those criteria include regulations that are "outdated, unnecessary, or ineffective." This is clearly true of the NRD assessment regulations.

Specific Issues Needing Task Force Review

The NRD assessment regulations -- and related implementation protocols -- should be revised to impose logical boundaries on the NRD assessment process so as to prevent or minimize the current potential for lengthy studies and unconstrained damage claims and lead to more expeditious and cost-effective restoration of affected resources.

Regulatory Changes Needed

Changes to the NOAA regulations to promote the above goal could include those changes below. The DOI regulations are longer and more complex than the NOAA regulations and we are are simultaneously

providing to the Department of the Interior Regulatory Reform Officer (RRO) a number of suggested changes to DOI's NRDA regulations that would promote the above goal (see Appendix A).

Changes to the NOAA regulations could include:

- Revisions to the provisions on injury determination and quantification to emphasize that injuries are to be determined relative to baseline conditions (as defined in Appendix A) and are to be based on actual and demonstrable harm to natural resources at the site in question (as also defined in Appendix A).

- Elimination of the provision allowing valuation scaling (valuation of the lost and replacement services) for compensatory restoration, or at least application of the non-use valuation methods or other speculative methods in conducting such scaling.

- A requirement that every NRD assessment set out time and cost targets at the outset (and optionally also set a target date for settlement based on the facts of the case at the outset of the assessment or soon after the assessment begins).

Range of Possible Actions

Among the range of possible actions are:

(1) Modify the regulations;

(2) Consolidate the Interior and NOAA regulations;

(3) Formulate a new and more direct mechanism – statutory, regulatory, other – to restore natural resources affected by hazardous waste releases and oil;

(4) Issue Policy Memoranda at the highest level of the Department of Commerce/NOAA so as to alleviate the inefficiencies in the current regulations and setting forth criteria for the performance of NRD assessments, including:

- Focus on restoring injured resources at the earliest practicable date by implementing cost-effective restoration projects.

- Prohibition of compensable value or compensatory restoration in NRD assessments unless specifically approved at senior level of NOAA following a thorough evaluation of need

- Ensure that injuries and service losses are measured relative to baseline, and that baseline must include all conditions that are unrelated to the specific releases (as defined in Appendix A).

- Focus the determination of injury on documented actual and demonstrable harm to natural resources at the site in question and the consequent loss of services provided by those resources (as also described in Appendix A).

- Set out time and cost targets for every new and pending NRD assessment.

Closing

The Group is prepared to provide case histories and data to aid Commerce/NOAA's Regulatory Task Force review of the Natural Resource Damage Assessment regulations.

We would be happy to answer any questions you may have and/or meet with the Task Force as desired. I may be reached at Ex. 6 or by email at bjg@nrdonline.org.

Respectfully,

Barbara Goldsmith

FOR: Ad-Hoc Industry Natural Resource Management Group

Note: Nothing in this memorandum should be construed as representing the views of any individual member company of the Ad-Hoc Industry Natural Resource Management Group.

Appendix A

Suggested Changes Needed to Interior NRD Assessment Regulations at 43 CFR Part 11

1. Focus to the extent possible on primary restoration – i.e., restoring injured resources to their baseline condition at the earliest practicable date by implementing cost-effective restoration projects – and eliminate or constrain the concept of interim compensable value.
    - The focus on restoration is consistent with the provision in § 107(f)(1) of CERCLA that NRD may be used only for restoration, replacement, or acquisition of the equivalent.
    - If the allowance for interim damages is retained, replace compensable value with the concept of compensatory restoration, as used in the NOAA regulations – i.e., restoration projects to replace the interim lost services pending primary restoration. In addition, trustees should not be allowed to employ non-use valuation methods or other speculative methods in determining the value of the interim lost services.

2. Emphasize that damages must be based on injuries and lost services compared to baseline conditions – i.e., conditions that would exist in the absence of the specific releases in question – and that baseline must thus include all conditions unrelated to those releases, including, but not limited to, naturally occurring substances/conditions, general industrial development, other sources, and permitted discharges.

3. Eliminate the current detailed broad provisions defining injury and, instead, require that the determination of injury should be based on documented actual and demonstrable harm to natural resources at the site in question and the consequent loss of services provided by those resources, and should not be based on changes that do not affect services, effects on individual biological organisms rather than impacts to local populations, effects shown only in laboratory studies or at other sites and not at the site involved, and effects derived from speculative injury models.

4. Require every NRD assessment to set out time and cost targets for the assessment [optional: and settlement] at the outset.

Ad-Hoc INDUSTRY
NATURAL RESOURCE
MANAGEMENT GROUP

May 17, 2017

MEMORANDUM

TO: James Cason
Regulatory Reform Officer, United States Department of the Interior

FROM: Barbara J. Goldsmith
Executive Director, Ad-Hoc Industry Natural Resource Management Group

RE: The Need to Include the Department's Natural Resource Damage Assessment Regulations (43 CFR Part 11) in the List of Interior's Regulations to be Reviewed for Modification, Replacement or Repeal

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Summary of Requested Action

The Department's Natural Resource Damage (NRD) Assessment regulations need to be modified or replaced. Since 1980, there have been over 850 documented NRD cases involving nearly 1000 separate settlements totaling $17 billion.[1] Individually and collectively, US-based companies have had to expend huge amounts in transaction costs as cases have stalled and then must pay Interior for the work performed (with no set time or cost limits) to assess NRD at specific sites. *Any federal regulatory program that has resolution of NRD taking decades in some cases and/or is holding large amounts in the US Treasury because collection of funds from businesses has outpaced the Department's ability to spend funds collected to restore "injured" natural resources is a strong candidate for regulatory reform review.* **We respectfully request that the Department of the Interior (DOI) NRD assessment regulations be added to the list of regulations to be reviewed by the Department's Regulatory Task Force.**

Introduction and Purpose of Memorandum

This memorandum is written on behalf of the companies that make up the nearly 30-year-old Ad-Hoc Industry Natural Resource Management Group (Group). This unique group of major multinational companies is singularly focused on the interface between natural resources (air, water, land, biota) and industrial, energy and transportation activities. We have been the key industry group engaged with the Department since it first proposed in late 1985 NRD assessment regulations governing hazardous substance releases as required under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund). The Group has enjoyed a positive relationship with the Department. In addition to providing comments on every proposed rulemaking as they have come up, we

[1] Source: Ad-Hoc Industry Natural Resource Management Group Database. This proprietary database has catalogued the details of every NRD case since 1980 and likely comprises the most comprehensive information anywhere in the country on NRD liability and related issues.

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also set up mechanisms for ongoing communication and practice exchange and have more recently launched cooperative initiatives with Interior and other key Federal Government Departments -- all aimed at encouraging a reasonable, balanced, and predictable practice arena.

While there have certainly been advances over the years, we are at a critical juncture following the unprecedented effort expended by private and public sectors alike to assess and settle natural resource damages related to the Deepwater Horizon incident. This provides an ideal time to assess what is and is not working and the role that the Interior regulations play in this.[2] We are heartened by the President's current efforts to examine those regulations that may be a candidate for change, replacement, or repeal. **It is our view that the DOI's NRD assessment regulations at 43 CFR Part 11 are an appropriate candidate for Regulatory Task Force review per the President's Executive Orders.** We are simultaneously suggesting to the Department of Commerce's Regulatory Reform Officer that they examine the NRD assessment regulations promulgated by the National Oceanic and Atmospheric Administration (NOAA) under the Oil Pollution Act (OPA) and found in 15 CFR Part 990. In fact, the very existence of two sets of federal regulations may in itself create the kind of inefficiencies that the President's Executive Orders are seeking to avoid. The DOI regulations were last updated in 2008 and NOAA's in 2002.

The remainder of this memorandum highlights key areas of needed change and how alternate approaches could result in a more cost-effective approach to assessing natural resource injuries, reaching settlement, and restoring the services attendant to natural resources affected by a release of hazardous waste or oil.

Synopsis of Regulation

CERCLA provides that responsible parties for releases of hazardous substances are liable, in addition to cleanup, for "damages for injury to, destruction of, or loss of natural resources" caused by their releases (CERCLA § 107(a)(C)) – referred to as NRD. It provides further that NRD recovered may be used "only to restore, replace, or acquire the equivalent of [the injured] natural resources" (*id.* § 107(f)(1)). Similarly, OPA provides for the recovery of NRD for discharges of oil (OPA § 1006). Under both statutes, NRD are assessed and recovered by federal, state, and/or Indian tribal trustees for the natural resources affected. Two sets of regulations have been issued to govern the NRD assessment process – those promulgated by DOI under CERCLA pertaining to hazardous substance releases (43 CFR Part 11) and those promulgated by NOAA under OPA pertaining to oil discharges (15 CFR Part 990). Use of the regulations is optional per CERCLA and OPA; however, if a trustee uses the regulations, its NRD assessment is entitled to a rebuttable presumption in its favor in a judicial action to recover the NRD. However, despite the optional nature of the regulations, they form, in most cases, the basis of -- or the benchmark for – assessments, in whole or part, which are then used to settle cases. Thus, the practical effect of the regulations cannot be minimized.

Effects of the NRDA Regulations

There are a number of problems with the Interior regulations and their implementation by the Department acting as "trustee" (for natural resources as defined under CERCLA) that make the assessment process inefficient, ineffective, and unduly contentious, lead to unreasonably large and unbounded claims for NRD, and hinder prompt and cost-effective restoration of the affected natural resources. These problems include the following:

[2] Interior's review of its NRDA regulations should incorporate review of the trustee/US Environmental Protection Agency (EPA) interface to identify opportunities for improved regulatory effectiveness on remedial and NRD sides, recognizing the synergies inherent in the two programs. Likewise, we are requesting that NOAA incorporate review of the trustee/US Coast Guard interface.

1. While the Interior regulations set forth a step-wise process for assessment and more recently focus on projects to restore injured natural resources, the NRD assessment process prescribed by the regulations is complicated and cumbersome and often leads to excessive delays in settlement and/or in restoring natural resources. Moreover, there are no cost or time limits imposed by the regulations. Trustees often spend many years – sometimes decades – conducting endless studies of the resources without restoring them.

2. In determining the natural resource injuries that are compensable in NRD, trustees sometimes improperly include impacts that have occurred over time but were not caused by responsible parties' releases, such as those resulting from naturally occurring substances/conditions, general industrial development, other sources, and permitted discharges.

3. Given the broad definitions of injuries, especially in the DOI regulations, trustees often include effects that have not caused any actual or demonstrable harm to the environment or to services provided by the resources to the public – such as impacts to groundwater that is not used by anyone, effects on individual biological organisms that have not been shown to affect local populations of the plants or animals, effects shown only in laboratory studies or at other sites and not at the actual site involved, effects derived from speculative injury models, etc.

4. While the regulations provide for NRD to include the cost of restoring the damaged resources (called "primary restoration"), they also allow recovery of NRD based on the asserted value of the interim loss of the resources or their services prior to primary restoration (called "compensable value" in the DOI regulations). They allow trustees to estimate that value through a variety of techniques, some of which are highly speculative, including techniques for attempting to estimate "non-use" value (value that the public may derive from the existence of a resource without using it, which is notoriously difficult to measure). This can lead trustees to seek the largest monetary damage payment their experts can devise, rather than seeking to implement the most cost-effective projects that can promptly restore the resources.

Better or Different Regulations Needed

Given problems such as those cited above, the NRD regulations meet the criteria of Section 3(d) of Executive Order 13777 (Enforcing the Regulatory Reform Agenda, Feb. 24, 2017) for regulations that an agency's Regulatory Reform Task Force should identify for potential repeal, replacement, or modification. Those criteria include regulations that are "outdated, unnecessary, or ineffective." This is clearly true of the NRD assessment regulations.

Specific Issues Needing Task Force Review

The NRD assessment regulations -- and related implementation protocols -- should be revised to impose logical boundaries on the NRD assessment process so as to prevent or minimize the current potential for lengthy studies and unconstrained damage claims and lead to more expeditious and cost-effective restoration of affected resources.

Regulatory Changes Needed

The following changes to the DOI regulations would promote the above goal:

1. Focus to the extent possible on primary restoration – i.e., restoring injured resources to their baseline condition at the earliest practicable date by implementing cost-effective restoration projects – and eliminate or constrain the concept of interim compensable value.

- The focus on restoration is consistent with the provision in § 107(f)(1) of CERCLA that NRD may be used only for restoration, replacement, or acquisition of the equivalent.
- If the allowance for interim damages is retained, replace compensable value with the concept of compensatory restoration, as used in the NOAA regulations – i.e., restoration projects to replace the interim lost services pending primary restoration. In addition, trustees should not be allowed to employ non-use valuation methods or other speculative methods in determining the value of the interim lost services.

2. Emphasize that damages must be based on injuries and lost services compared to baseline conditions – i.e., conditions that would exist in the absence of the specific releases in question – and that baseline must thus include all conditions unrelated to those releases, including, but not limited to, naturally occurring substances/conditions, general industrial development, other sources, and permitted discharges.

3. Eliminate the current detailed broad provisions defining injury and, instead, require that the determination of injury should be based on documented actual and demonstrable harm to natural resources at the site in question and the consequent loss of services provided by those resources, and should not be based on changes that do not affect services, effects on individual biological organisms rather than impacts to local populations, effects shown only in laboratory studies or at other sites and not at the site involved, and effects derived from speculative injury models.

4. Require every NRD assessment to set out time and cost targets at the outset (and optionally also set a target date for settlement based on the facts of the case at the outset of the assessment or soon after the assessment begins).

Range of Possible Actions

Among the range of possible actions are:

(1) Modify the regulations;

(2) Consolidate the Interior and NOAA regulations;

(3) Formulate a new and more direct mechanism – statutory, regulatory, other – to restore natural resources affected by hazardous waste releases and oil;

(4) Issue Policy Memoranda at the highest level of the Department – applicable to the US Fish and Wildlife Service and all other bureaus of the Department -- so as to alleviate the inefficiencies in the current regulations and setting forth criteria for the performance of NRD assessments, including:

- Focus on restoring injured resources at the earliest practicable date by implementing cost-effective restoration projects.
- Prohibition of compensable value or compensatory restoration in NRD assessments unless specifically approved at senior level of the Department following a thorough evaluation of need
- Ensure that injuries and service losses are measured relative to baseline, and that baseline must include all conditions that are unrelated to the specific releases (as described above).

- Focus the determination of injury on documented actual and demonstrable harm to natural resources at the site in question and the consequent loss of services provided by those resources (as also described above).

- Set out time and cost targets for every new and pending NRD assessment.

Closing

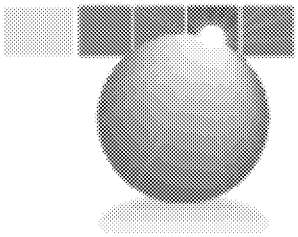
The Group is prepared to provide case histories and data to aid Interior's Regulatory Task Force review of the Natural Resource Damage Assessment regulations.

We would be happy to answer any questions you may have and/or meet with the Task Force as desired. I may be reached at Ex. 6 or by email at bjg@nrdonline.org.

Respectfully,

Barbara Goldsmith
FOR: Ad-Hoc Industry Natural Resource Management Group

Note: Nothing in this memorandum should be construed as representing the views of any individual member company of the Ad-Hoc Industry Natural Resource Management Group.



Ad-Hoc INDUSTRY

NATURAL RESOURCE MANAGEMENT GROUP

May 15, 2017

MEMORANDUM

TO: Samantha Dravis, Esq.
Regulatory Reform Officer, United States Environmental Protection Agency

FROM: Barbara J. Goldsmith
Executive Director, Ad-Hoc Industry Natural Resource Management Group

RE: Request for Review -- The Inter-Relationship Between EPA Policies and Regulations and the Natural Resource Damage Assessment Regulations of the US Department of the Interior (43 CFR Part 11) and NOAA (990 CFR Part 15)

Summary of Requested Action

Since many of the nation's hazardous waste sites involve Natural Resource Damage (NRD) issues, there are potential opportunities to create a more cost-effective way to approach natural resources damages at Superfund sites. While EPA's responsibility relative to NRD is limited (with the notable exception of its role as trustee in the Deepwater Horizon Natural Resource Damage Assessment), in practice, cleanup and NRD are often tied together, notably related to data -- and in some cases, synergies between remedial actions and restoration projects (with both positive and negative outcomes). Since there are problems with the Interior and NOAA regulations (highlighted below), we believe that review of the Interior and NOAA regulations should also include a review of the interface with EPA regulations and policies to identify possible actions that could result in a more effective overall practice via regulatory or other changes.

Introduction and Purpose of Memorandum

This memorandum is written on behalf of the companies that make up the nearly 30 year old Ad-Hoc Industry Natural Resource Management Group ("Group"). This unique group of major multinational companies is singularly focused on the interface between natural resources (air, water, land, biota) and industrial, energy and transportation activities. We have been the key industry group engaged with all five Federal Government "trustee" Departments and Agencies. In addition to providing comments on relevant US DOI and NOAA NRDA rulemakings over the years, we have had in place (since 1999) mechanisms to permit ongoing communication and practice exchange and we have more recently launched cooperative database and other initiatives -- all aimed at encouraging a reasonable, balanced, and predictable practice arena.

While there have certainly been advances in NRD practice over the years, we are at a critical juncture following the unprecedented effort expended by private and public sectors alike to assess and settle natural resource damages related to the Deepwater Horizon incident. This provides an ideal time to assess what is and is not working and the

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role that the current Interior and NOAA regulations play in this. We are heartened by the President's current efforts to examine those regulations that may be a candidate for change or replacement or repeal. It is our view that the Interior regulations at 43 CFR Part 11 and NOAA Regulations at 990 CFR Part 15 are appropriate candidates for Regulatory Task Force review by those agencies per the President's Executive Order 13777. Further, it is our view that these reviews might entail examination of the interface with EPA (and Coast Guard too) to identify possible opportunities and needs via regulation or otherwise. More effective NRDA regulations to remedy current problems and/or alternate (non-regulatory) approaches to assessing and settling natural resource damage issues could result in faster and more cost-effective cleanups.

Synopsis of Regulation

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or "Superfund") provides that responsible parties for releases of hazardous substances are liable, in addition to cleanup, for "damages for injury to, destruction of, or loss of natural resources" caused by their releases (CERCLA § 107(a)(C)) – referred to as natural resource damages (NRD). It provides further that NRD recovered may be used "only to restore, replace, or acquire the equivalent of [the injured] natural resources" (*id.* § 107(f)(1)). Similarly, the Oil Pollution Act of 1990 (OPA) provides for the recovery of NRD for discharges of oil (OPA § 1006). Under both statutes, NRD are assessed and recovered by federal, state, and/or Indian tribal trustees for the natural resources affected. Two sets of regulations have been issued to govern the NRD assessment process – those promulgated by the Department of the Interior (DOI) under CERCLA pertaining to hazardous substance releases (43 CFR Part 11) and those promulgated by the National Oceanic and Atmospheric Administration (NOAA) under OPA pertaining to oil discharges (15 CFR Part 990). Use of the regulations is optional per CERCLA and OPA; however, if a trustee uses the regulations, its NRD assessment is entitled to a rebuttable presumption in its favor in a judicial action to recover the NRD. However, despite the optional nature of the regulations, they form, in most cases, the basis of -- or the benchmark for – assessments, in whole or part, which are then used to settle cases. Thus, the practical effect of the regulations' importance cannot be minimized.

Effects of the NRDA Regulations

There are a number of problems with the Interior regulations and their implementation by the Department acting as "trustee" (for natural resources as defined under CERCLA) that make the assessment process inefficient, ineffective, and unduly contentious, lead to unreasonably large and unbounded claims for NRD, and hinder prompt and cost-effective restoration of the affected natural resources. Some of these problems are similarly present via the NOAA regulations. These problems include the following:

1. While the regulations set forth a step-wise process for assessment and more recently focus on projects to restore injured natural resources, the NRD assessment process prescribed by the regulations is complicated and cumbersome and often leads to excessive delays in settlement and/or in restoring natural resources. Moreover, there are no cost or time limits imposed by the regulations. Trustees often spend many years – sometimes decades – conducting endless studies of the resources without restoring them.

2. In determining the natural resource injuries that are compensable in NRD, trustees sometimes improperly include impacts that have occurred over time but were not caused by responsible parties' releases, such as those resulting from naturally occurring substances/conditions, general industrial development, other sources, and permitted discharges.

3. Given the broad definitions of injuries, especially in the DOI regulations, trustees often include effects that have not caused any actual or demonstrable harm to the environment or to services provided by the resources to the public – such as impacts to groundwater that is not used by anyone, effects on individual biological organisms that have not been shown to affect local populations of the plants or animals, effects

shown only in laboratory studies or at other sites and not at the actual site involved, effects derived from speculative injury models, etc.

4. While the regulations provide for NRD to include the cost of restoring the damaged resources (called "primary restoration"), they also allow recovery of NRD based on the asserted value of the interim loss of the resources or their services prior to primary restoration (called "compensable value" in the DOI regulations). They allow trustees to estimate that value through a variety of techniques, some of which are highly speculative, including techniques for attempting to estimate "non-use" value (value that the public may derive from the existence of a resource without using it, which is notoriously difficult to measure). This can lead trustees to seek the largest monetary damage payment their experts can devise, rather than seeking to implement the most cost-effective projects that can promptly restore the resources.

Better or Different Regulations Needed

Given problems such as those cited above, the NRD regulations meet the criteria of Section 3(d) of Executive Order 13777 (Enforcing the Regulatory Reform Agenda, Feb. 24, 2017) for regulations that an agency's Regulatory Reform Task Force should identify for potential repeal, replacement, or modification. Those criteria include regulations that are "outdated, unnecessary, or ineffective." This is clearly true of the NRD assessment regulations.

Specific Issues Needing Task Force Review

The Group is separately writing to the US Departments of the Interior and Commerce to request that the NRD assessment regulations and related implementation protocols be reviewed and revised to impose logical boundaries on the NRD assessment process. Such action would prevent or minimize the current potential for lengthy studies and unconstrained damage claims and lead to more expeditious and cost-effective restoration of affected resources. These reviews should incorporate review of the trustee/EPA interface to identify opportunities for improved regulatory effectiveness on remedial and NRD sides, recognizing the synergies inherent in the two programs.

Closing

The Group is prepared to provide case histories and data to aid US EPA's Regulatory Task Force review of the interface with NRD issues when it addresses US EPA regulations that are candidates for modification, replacement or repeal.

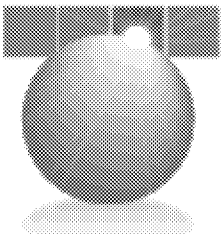
We would be happy to answer any questions you may have and/or meet with the Task Force as desired. I may be reached at Ex. 6 or by email at bjg@nrdonline.org.

Respectfully,

Barbara Goldsmith

FOR: Ad-Hoc Industry Natural Resource Management Group

Note: Nothing in this memorandum should be construed as representing the views of any individual member company of the Ad-Hoc Industry Natural Resource Management Group.



Ad-Hoc INDUSTRY

NATURAL RESOURCE MANAGEMENT GROUP

THE RELATIONSHIP BETWEEN CLEAN UP (AT SUPERFUND AND OTHER HAZARDOUS WASTE SITES) AND RESTORATION OF NATURAL RESOURCES: A BEST PRACTICE APPROACH FOR INDUSTRIAL COMPANIES AND OTHERS

Draft for Discussion

Definition of the Issue

The statutes, regulations and guidance governing the cleanup/remediation process and the natural resource damage assessment (NRDA) and restoration process mandate that these processes are separate and sequential in that NRD is a residual after clean up.[1] However, experience has shown that some joint consideration of the two processes and opportunities for coordination of data collection and analysis and other activities can save time and money and sometimes even restore the injured natural resources to baseline. This document outlines some of the background regarding this matter and the kinds of circumstances which can favor remediation/restoration coordination, or, conversely, argue for complete bifurcation of the two processes -- or warrant a possible middle ground, where certain portions of the cleanup/assessment processes (but not all) can be better coordinated. A best practice approach is provided here to aid companies and others considering coordination of remediation and restoration.

Historical and Current Practice

There have been some limited prior efforts to explore the topic of coordinating cleanup/remedial activities and natural resource damage assessment and restoration. In 2008, a workshop was convened by the Society for Environmental Toxicology and Chemistry (SETAC), "The Nexus Between Ecological Risk Assessment and Natural Resource Damage Assessment Under CERCLA: Understanding and Improving the Common Scientific Underpinnings" which examined the interface between the Ecological Risk Assessment (ERA) and the NRDA Process. In June 2014, SETAC, in collaboration with the Society of Ecological Restoration (SER), further examined the relationship

[1] See Appendix A which summarizes the statutory and regulatory requirements concerning the relationship between remediation and restoration.

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between remediation and restoration, including restoring contaminated ecosystems and preventing contamination during restoration activities. In addition, the 2012 Department of Energy (DOE) policy, "Directive 140. Natural Resource Damage Assessment Cooperation and Integration", strongly advocates coordination of the two processes, in part because DOE can be both a Trustee and PRP at a site. Finally, the State of Texas has regulatory requirements allowing Trustee participation in the Texas Risk Reduction Program's Ecological Risk Assessment process, mandating notification of Trustees at several points in the process, and outlining the details of coordination between the NRD Trustees, responsible parties, and response agencies.[2]

Each of these sources provides "food for thought" relative to the interplay between statutory and regulatory requirements, scientific commonalities such as characterization and quantification of risk and injury, cost efficiencies and common sense. In actual practice, we currently see a mix of coordination, bifurcation and middle ground. In general, the interrelationship between cleanup and NRDA and restoration is much more clearly seen in oil spills, typically involving emergency response efforts than Superfund or other long term continuing hazardous waste release situations. However, the remedial investigation/feasibility study and remedial selection process under CERCLA requires the consideration of whether natural resources "… are or may be injured by the release…"[3] as part of the evaluation of remedial alternatives, thereby providing an opportunity to evaluate net environmental benefits of remedial alternatives, including potential enhancements of ecological and human use services, prior to implementing the site's remedy. In theory, under CERCLA, the net benefits analysis is part of the Feasibility Study process reviewed by both EPA/state agencies and Trustees (e.g., Biological Technical Assistance Group, BTAG) as part of their review. There are several potential benefits to a PRP, including a more natural resource friendly and less costly remedial actions, reduced areal extent of remediation, quicker recovery to baseline and more.

Toward a Possible Improved Practice Approach

Based on recent experience, considering the remediation/restoration interface at specific sites from the outset can be both productive and beneficial. Where appropriate, given a site's specific characteristics and assuming there is agreement among the parties, coordination of remediation and restoration activities can result in an overall process that is more cost-effective, streamlined and efficient; prevents duplication of effort; minimizes the potential to "over engineer" a remedy; has the potential for parties to get to settlement and resource restoration sooner; and maximizes the potential for incorporating ecological enhancements into post-remediation restoration. Despite the potential benefits of coordinating cleanup/restoration processes, there are also risks, including legal barriers

[2] Texas Risk Reduction Program Rules, 30 Tex. Admin. Code 350, Texas Natural Resource Conservation Commission Memoranda of Understanding, 30 Texas Admin. Code 7.124

[3] 40 CFR §300.430 (b)(7)

which could prevent and/or delay settlement of an NRD claim if restoration activities are done prior to a Record of Decision.

Circumstances Favoring Coordination of Remediation and Restoration

There are site-specific, as well as party-specific, factors that will likely play a role as to whether and how the remediation/restoration interface is considered at a particular NRD case or site. Listed below are examples of some of the circumstances when closer alignment remediation and restoration may be beneficial. Also provided are those circumstances where a sequential approach to remediation and restoration may be more appropriate.

Closer alignment of the remediation, assessment and restoration processes may be favored at a specific NRD case or site IF:

a. The site involves a single or few Trustees/Potentially Responsible Parties (PRPs), as this can potentially be a less complex situation and encourage more streamlined communication;

b. The parties are open to coordination of remediation and restoration;

c. Agreement can be established between parties relative to the level of communication and coordination needed to facilitate the process;

d. The spatial and temporal scope and allegedly injured natural resources/services are clearly identifiable;

e. The remedial investigation/feasibility study and selection of remedial remedy are in a state that allows incorporation of enhanced restoration;

f. Cleanup is in the early stages and enhanced restoration can be considered in an adaptive management approach;

g. Trustees are open to being actively engaged in the remedial process;

h. There is a desire and/or need to restore specific natural resources quickly;

i. There is potential opportunity to collect data which could be used for purposes of both an Ecological Risk Assessment and NRDA at the site;

j. Desired restoration projects have already been identified for the site, allowing for the parties to consider possible implementation of such projects during the cleanup phase;

k. It is apparent, by reasonable assumptions, that the remedial action will likely not fully address the allegedly injured resources/services;

l. Appropriate NRD liability credits and/or ways to resolve potential NRD claims can be identified and agreed to by the parties pursuant to the settlement of all liability claims at the site;

m. Key issues related to liability limits (e.g., baseline, causation) can either be agreed to by parties or a negative determination can been made that they are not critical given site specific characteristics, including those instances where determining baseline and/or causation would be too arduous, expensive or time intensive;

n. There is a solid working relationship between the PRP(s), Trustee(s), and the EPA, so as to facilitate agreement on key points; The timeline of the remedial action is such that it is advantageous to perform restoration before the remedial action is finished; There are potential opportunities to perform restoration work in tandem with the remedy;

o. The site has a high potential to provide enhanced ecological and human use services, such as those outside urban areas and/or adjacent to undisturbed habitats or natural areas. Also, "attractive nuisances" may result in additional injury. For example, restoration of services at small sites in urban areas and/or highly impacted watersheds could potentially result in greater exposure of ecological receptors to chemical and anthropogenic stressors.

p. There is opportunity to provide compensatory mitigation onsite above and beyond standard remediation.

q. Clean up or restoration costs can be reduced by coordinating these projects.

Circumstances Favoring Bifurcation of Remediation and Restoration

The following circumstances and/or conditions generally encourage a sequential approach of remediation and NRDA and restoration activities IF:

a. The site has a final remedial design and implementation schedule that would allow the for calculation of natural resource damages with greater precision;

b. The PRP decides, as a legal matter, to keep the processes bifurcated;

c. A proposed restoration project would be inconsistent, would be undone, or negatively impacted by future remediation work, or would interfere with ongoing or anticipated remedial actions;

d. There are personnel or other resource conflicts in conducting remedial and restoration activities at the same time;

e. Other possible factors.

A Best Practice Approach

In those instances where coordination of remediation/restoration is viewed to be potentially beneficial, the following best practices should be considered.

a. Evaluate the potential benefits and burdens of coordination at the outset. Coordination does not always yield benefits, and a poorly designed coordination effort may require extra time and effort and ultimately increase costs;

b. Commit to an open dialogue about benefits and burdens between PRPs, trustees and agencies as well as between agencies with different responsibilities when coordination offers benefits to all parties;

c. Discuss and establish target timeline and endpoints during the remediation and NRDA processes;

d. Identify decision junctures in the remedial and NRDA process where the parties can evaluate data adequacy, in order to prevent duplicative or needless studies and analysis from being undertaken during the remedy or assessment;

e. Agree that implementation of restoration projects during the remedial phase is not an admission of liability by the PRP(s);

f. Identify and discuss ways to overcome technical uncertainties when parties seek to resolve NRD claims prior to final ROD. For example, discuss legal barriers to settlement in order to obtain judicial approval, including commencing an NRD action under all possible statutory authorities and incorporating reliable estimates of PRP-specific and site-wide NRD.

Summary and Conclusion

There are opportunities and risks for companies to consider the interface between remediation and restoration at sites involving hazardous waste issues nationwide. The above is intended to identify ways in which industrial parties and other can evaluate potential opportunities and risks to coordinate the processes, ensuring a more cost-effective and productive result. This document will be updated as warranted.

August 2016

APPENDIX A:
OVERVIEW OF KEY NATURAL RESOURCE DAMAGES STATUTORY AND REGULATORY REQUIREMENTS

This Appendix contains background information on the Natural Resource Damage (NRD) provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Oil Pollution Act (OPA) and the implementing regulations under these two statutes. Included are:

A.1 Highlights of the key statutory provisions in CERCLA and OPA, respectively, pertaining to NRD (these descriptions are adapted from a U.S. Environmental Protection Agency (EPA) website, identified below; the Ad-Hoc Industry Natural Resource Damage Group does not warrant the validity of any statutory interpretation embodied in these descriptions);

A.2 Chronologies of the development of Natural Resource Damage Assessment (NRDA) regulations under CERCLA and OPA, including challenges to the respective regulations;

A.3 Summaries of the U.S. Department of the Interior's (DOI's) Natural Resource Damage Assessment (NRDA) regulations (under CERCLA) and the U.S. Department of Commerce National Oceanic and Atmospheric Administration's (NOAA's) NRDA regulations (under OPA); and

A.4 Copies of the two sets of currently operative regulations.

NRD PROVISIONS IN CERCLA

The following material was adapted from: http://www.epa.gov/superfund/programs/nrd/statute.htm.

Section	Description
§101(6)	**Definition of Damages** - Defines "damages" as "injury or loss of natural resources," as set forth in Sections 107(a)(4)(C) and 111(b).
§101(16)	**Definition of Natural Resources** - Defines "natural resources" as "land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States ... any State or local government, any foreign government, [or] any Indian [T]ribe." Any member of an Indian Tribe can be a trustee if the resources are subject to a trust restriction on alienation.
§104(b)(2)	**Requirement of Trustee Notification** - Directs the President to notify the appropriate Federal and State Natural Resource Trustees of "potential damages to natural resources resulting from releases under investigation ... and ... to coordinate the assessments, investigations, and planning" with such trustees.
§107(a)(4)(C)	**Liability for NRD** - Defines the scope of natural resource liability as "damages for, injury to, destruction of, or loss of natural resources, including the reasonable costs of assessing such injury, destruction or loss resulting from" a release of hazardous substances or a threatened release that causes the incurrence of response costs.
§107(f)(1)	**Liability for Natural Resource Damages** - States that, if NRD is proved under Section 107(a)(4)(C), liability shall be to the following parties: the United States Government, any State, or an Indian Tribe. For liability to extend to a State, the natural resources must be "within the State or belonging to, managed by, controlled by, or appertaining to such State." For liability to extend to an Indian Tribe, the natural resources must be "belonging to, managed by, controlled by, or appertaining to such [T]ribe, or belong to a member of such [T]ribe if such resources are subject to a trust restriction on alienation."
§107(f)(1)	**Limitation on Natural Resource Liability** - States the following conditions for not finding a party liable for NRD: (1) if the party has demonstrated that the NRD was specifically identified as an irreversible and irretrievable commitment of natural resources in an environmental impact statement or comparable analysis; (2) the decision to grant the permit or license authorizes the commitment of natural resources; and (3) the facility or project was operating within the terms of the permit or license. [In the case of Indian Tribes, the issuance of the permit or license must not be inconsistent with the fiduciary duty of the United States.]
§107(f)(1)	**Designation of Trustees** - Requires the President, or authorized representative of any State, to act on behalf of the public as trustee to recover damages.
§107(f)(1)	**Use of Recovered Funds** - Stipulates that sums recovered by Federal and State trustees for NRD shall be retained by the trustee "only to restore, replace, or acquire the equivalent of" the subject natural resources. When the United States Government is the trustee, the award can be used "without further appropriation."
§107(f)(1)	**Measurement of Damages** - States that measurement of NRD shall "not be limited by the sums which can be used to restore or replace" the subject natural resources.

Section	Description
§107(f)(1)	**Prohibition of Double Recovery** - Prohibits double recovery for NRD, including recovering the costs of assessment, restoration, rehabilitation, or acquisition for the same release and same natural resource.
§107(f)(1)	**Limitation on Retroactivity** - Prohibits NRD recovery, where the damages and the release of hazardous substances occurred wholly before the date of enactment of CERCLA (*i.e.*, December 11, 1980).
§107(f)(2)(A)	**Designation of Trustees** - Requires the President to designate in the National Contingency Plan (NCP) the Federal officials who shall act on behalf of the public as trustees for natural resources. [This designation can be found at 40 CFR Part 300, Subpart G.]
§107(f)(2)(A)	**Responsibilities of Trustees** - Requires Federal trustees to "assess damages for injury to, destruction of, or loss of natural resources ... under their trusteeship." Federal trustees may assess damages for State natural resources "upon request of and reimbursement from a State and at the Federal officials' discretion."
§107(f)(2)(B)	**Designation of Trustees** - Requires the State Governor to designate State officials who may act on behalf of the public as trustees for natural resources. The Governor shall notify the President of these designations.
§107(f)(2)(B)	**Responsibilities of Trustees** - Requires State trustees to "assess damages for injury to, destruction of, or loss of natural resources ... under their trusteeship."
§107(f)(2)(C)	**Rebuttable Presumption and Judicial Review** - Requires that a determination or assessment of NRD made by a trustee in accordance with regulations promulgated under CERCLA Section 301 shall have "the force and effect of a rebuttable presumption" in any administrative or judicial proceeding.
§111(a)(3)	**Use of Trust Fund for NRD** - Authorizes the Hazardous Substance Superfund (Superfund) to pay claims for NRD. [Superfund monies cannot be used to pay for natural resource claims.][1]
§111(b)	**Use of Trust Fund for NRD** - Authorizes the Superfund to pay "any claim for injury to, or destruction or loss of, natural resources, including the cost of damage assessment." [Superfund monies cannot be used to pay for natural resource claims.][1] The President can assert a natural resource claim for 1) natural resources over which the United States has sovereign rights, or 2) natural resources within the territory of the fishery conservation zone of the United States to the extent they are managed by the United States. States may assert claims for natural resources "within the State or belonging to, managed by, controlled by, or appertaining to such State." Indian Tribes, or the United States acting on behalf of Indian Tribes, can file claims for natural resources "belonging to, managed by, controlled by, or

[1] **Note:** While CERCLA provides authority for the Hazardous Substance Superfund to pay NRD claims [CERCLA § 111(a)(3) and § 111(b)], the Superfund Amendments and Reauthorization Act of 1986 and the Internal Revenue Code prohibit Superfund monies from being appropriated to pay such claims [26 U.S.C. § 9507(c)(1)(A)].

[1] **Note:** While CERCLA provides authority for the Hazardous Substance Superfund to pay NRD claims [CERCLA § 111(a)(3) and § 111(b)], the Superfund Amendments and Reauthorization Act of 1986 and the Internal Revenue Code prohibit Superfund monies from being appropriated to pay such claims [26 U.S.C. § 9507(c)(1)(A)].

Section	Description
	appertaining to such [T]ribe, or belong to a member of such [T]ribe if such resources are subject to a trust restriction on alienation."
§111(i)	**Restoration of Natural Resources** - Prohibits Superfund monies to be used for "the restoration, rehabilitation, or replacement or acquisition of the equivalent of any natural resources until a plan for the use of such funds has been developed and adopted" by the affected trustee, and "after adequate public notice and opportunity for hearing and consideration of all public comment." There is one exception to this requirement: in situations that require action to avoid an irreversible loss of natural resources or to prevent or reduce any continuing danger to natural resources, funds may used without the Section 111(i) plan. Affected trustees are: (1) Federal agencies; (2) the Governor or Governors of any State having sustained damages to natural resources within its borders, belonging to, managed by or appertaining to such State, and (3) the governing body of any Indian Tribe having sustained damage to natural resources belonging to, managed by, controlled by, or appertaining to such Tribe, or belonging to a member of such Tribe if such resources are subject to a trust restriction on alienation. [Superfund monies cannot be used to pay for natural resource claims.]
§113(g)(1)	**Period in Which NRD Action May be Brought** - States a number of conditions for bringing an NRD action: No action may be commenced for NRD unless the action is commenced within three years after the later of: the date of discovery of the loss; or the date on which regulations pertaining to NRD assessment are promulgated under Section 301(c). An action for recovery of NRD must be commenced within three years after completion of a remedial action (excluding operation and maintenance). This condition is applicable for NPL sites, Federal facilities, and any vessel or facility where a CERCLA remedial action is scheduled. Actions may also not be brought (1) prior to 60 days after the Federal or State Trustee provides to the President and the potentially responsible party a notice of intent to file suit or (2) before the selection of the remedial action if the President is diligently proceeding with the remedial investigation and feasibility study (RI/FS). This limitation does not apply to actions filed on or before October 17, 1986. Sections 113(g)(3)-(4) provide exceptions for the Section 113(g)(1) limitation period on actions involving contribution and subrogation. Section 113(g)(3) provides that no action for contribution of NRD may be commenced more than three years after: (1) the date of judgment for recovery of NRD; or (2) the date of an administrative or court order for a *de minimis* or cost recovery settlement. Section 113(g)(4) requires that, when a party is subrogated to a claim because that party has paid the claim, an action for recovery of those monies must be made within three years of the payment. [Section 126(d) describes the period in which an NRD action may be brought for Tribal claims.]
§122(j)(1)	**Coordination Between Federal Government and Trustees for NRD** - Directs the President to "notify the Federal [N]atural [R]esource [T]rustees of the negotiations" and to "encourage the participation of such [T]rustee in the

Section	Description
	negotiations" when involved in negotiations concerning a release that may have resulted in damages to natural resources under the trusteeship of the United States.
§122(j)(2)	**Covenant Not To Sue** - States that covenants not to sue for NRD under Federal trusteeship may be entered into "only if the Federal [N]atural [R]esource [T]rustee has agreed in writing to such covenant." The Federal trustee may agree to a covenant not to sue if the potentially responsible party agrees to undertake appropriate actions to protect and restore the injured natural resources.
§126(d)	**Period in Which Tribal NRD Claims May be Brought** - Provides that for Tribal trustees, the deadline for filing NRD claims is the later of: (1) expiration of the otherwise applicable period of limitations; or (2) two years after the United States, acting in its capacity as trustee for the Tribe, gives written notice to the Tribe that it will not present a claim on behalf of the Tribe or fails to present a claim within the time limitations specified elsewhere in the statute.
§301(c)	**Regulations Pertaining to NRD Assessment** - Directs the President to promulgate regulations pertaining to NRD assessment. The regulations shall specify (1) "standard procedures for simplified assessments requiring minimal field observation" ("Type A procedures") and (2) "alternative protocols for conducting assessments in individual cases" (Type B procedures). The regulations are to be reviewed and revised as appropriate every two years. The Type A procedures for "simplified assessments" shall include methods of establishing measures of damages based on units of discharge or release or units of affected areas. The Type B procedures for assessments in individual cases shall include methods of determining "the type and extent of short- and long-term injury, destruction, or loss." The regulations are to provide the "best available procedures to determine such damages, both direct and indirect injury, destruction, or loss and shall take into consideration factors including, but not limited to, replacement value, use value, and ability of the ecosystem or resource to recover."

NRD PROVISIONS IN OPA

The following material was adapted from: http://www.epa.gov/superfund/programs/nrd/statute.htm.

Section	Description
§1001(5)	**Definition of Damages** - Defines damages as those specified in Section 1002(b)(2), including "the cost of assessing these damages."
§1001(20)	**Definition of Natural Resources** - Defines natural resources as "land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States ... any State or local government or Indian [T]ribe, or any foreign government." Federal natural resources include the "resources of the exclusive economic zone."
§1002(a)	**Liability for NRD** - Specifies that "each responsible party for a vessel or a facility from which oil is discharged, or which poses a substantial threat of a discharge of oil…is liable for . . . damages specified in Section 1002(b)(2) that result from such an incident." The discharge or threat of discharge of oil must be into or upon navigable waters, adjoining shorelines, or the exclusive economic zone.
§1002(b)(2)	**Definition of Damages** - Outlines six categories of damages for which a responsible party is liable under Section 1002(a). These are: natural resources; real or personal property; subsistence use; revenues; profits and earning capacity; and public services. Damages to natural resources are defined as "injury to, destruction of, loss of, or loss of use of, natural resources, including the reasonable costs of assessing the damage." These damages are recoverable by Federal, State, Indian Tribe, and foreign government trustees. Damages to real or personal property are defined as "injury to, or economic losses resulting from destruction of, real or personal property." These damages are recoverable by the person who owns or leases that property. Damages to loss of subsistence use of natural resources "shall be recoverable by any claimant who so uses natural resources which have been injured, destroyed, or lost, without regard to the ownership or management of the resources." Damages for revenues are "equal to the net loss of taxes, royalties, rents, fees, or net profit shares due to the injury, destruction, or loss of real property, personal property, or natural resources. These damages are recoverable by the Federal government, a State, or a political subdivision of a State. Damages for profits and earning capacity are "equal to the loss of profits or impairment of earning capacity due to injury, destruction, or loss of real property, personal property, or natural resources." These damages are recoverable by any claimant. Damages for public services are the "net costs of providing increased or additional public services during or after removal activities." These damages are recoverable by a State or political subdivision of a State.

Section	Description
§1004	**Limitation on Natural Resource Liability** - Provides liability limits for potentially responsible parties and any removal costs incurred by, or on behalf of, the responsible party. The limits do not apply if the incident was proximately caused by gross negligence or willful misconduct of, or the violation of any applicable Federal safety, construction, or operating regulation by, the responsible party. In addition, the limits do not apply if the responsible party fails or refuses to report the incident as required by law or to provide all reasonable cooperation and assistance requested by responsible officials in connection with removal activities.
§1006(a)	**Liability for NRD** - Specifies that responsible parties shall be liable to the United States Government, States, Indian Tribes, or foreign government bodies for damages to natural resources "belonging to, managed by, controlled by, or appertaining to" each entity.
§1006(b)(1)-(5)	**Designation of Trustees** - States that the President or the authorized representative of any State, Indian Tribe, or foreign government, shall act on behalf of the public, Indian Tribe, or foreign country as trustee of natural resources "to present a claim for and to recover damages to the natural resources." Requires that the following parties designate trustees: the President will designate Federal trustees to act on behalf of the public; the Governor of each State will designate State and local officials to act on behalf of the public (and notify the President of such designation); the governing body of any Indian Tribe will designate Tribal officials to act on behalf of the Tribe or its members (and notify the President of such designation); and the head of any foreign government will designate the trustee to act on behalf of that government as trustee (and notify the President of such designation).
§1006(c)(1)-(5)	**Responsibilities of Trustees** - Sets up the functions of Federal, State, Indian Tribe, and foreign trustees. All trustees shall perform the following duties: assess NRD; and develop and implement plans for "the restoration, rehabilitation, replacement, or acquisition of the equivalent, of the natural resources under their trusteeship." These plans shall be developed and implemented only after adequate public notice, an opportunity for a hearing, and consideration of all public comment. The Federal government may, "upon request of and reimbursement from a State or Indian [T]ribe ... assess damages for the natural resources under the State's or Tribe's trusteeship."
§1006(d)(1)-(2)	**Measurement of Damages** - Specifies that the measure of NRD is the following: (1) "the cost of restoring, rehabilitating, replacing, or acquiring the equivalent of, the damaged natural resources"; (2) "the diminution in value of those natural resources pending restoration"; and (3) "the reasonable cost of assessing those damages." These costs shall be determined using the plans discussed under Section 1006(c).
§1006(d)(3)	**Prohibition of Double Recovery** - Prohibits double recovery for NRD for the same incident and natural resource.
§1006(e)(1)	**Regulations Pertaining to NRD Assessment** - Directs the President, acting through the Under Secretary of Commerce for Oceans and Atmosphere, to promulgate regulations for the assessment of NRD from discharge of oil no later than two years after the date of enactment of OPA.

Section	Description
§1006(e)(2)	**Rebuttable Presumption and Judicial Review**- Requires that any determination and assessment of damages made in accordance with the regulations promulgated under Section 1006(e)(1) shall have "the force and effect of a rebuttable presumption" in any administrative or judicial proceeding.
§1006(f)	**Use of Recovered Funds** - Specifies that sums recovered by trustees "shall be retained ... in a revolving trust account, without further appropriation, for use only to reimburse or pay costs incurred" by the trustee under Section 1006(c) with respect to the damaged natural resources. Any amounts in excess of those required for reimbursement and costs shall be deposited in this fund.
§1006(g)	**Court Review of Non-Discretionary Duty** - States that any person may have a Federal court review of actions by any Federal official where there is "alleged to be a failure of that official to perform a duty under Section 1006 that is not discretionary with that official." The court may award costs of litigation to any prevailing party.
§1007	**Required Showing by Foreign Claimants** - In addition to satisfying the other requirements of CERCLA, foreign claimants must make the following demonstration to recover NRD: (1) the claimant has not already been compensated for removal costs or damages; and (2) the recovery is authorized by a treaty or executive agreement between the United States and the claimant's country "or the Secretary of State...has certified that the claimant's country provides a comparable remedy for the United States claimants." There are special restrictions for foreign claimants making a claim for removal costs and NRD in foreign countries.
§1011	**Consultation on Removal Actions** - Requires the President to consult with the affected trustees, designated under Section 1006, on the appropriate removal action to be taken in connection with any discharge of oil.
§1012(a)(2)	**Uses of Trust Fund for NRD** - The Oil Spill Liability Trust Fund (Oil Spill Fund) is available for the payment of costs incurred by certain trustees in "assessing natural resource damages and for developing and implementing plans for the restoration, rehabilitation, replacement, or acquisition of the equivalent of damaged resources" that are determined by the President to be consistent with the NCP. Only Federal, State, and Indian Tribe trustees can receive payment of NRD costs from the Oil Spill Fund.
§1012(h)(2)	**Limitation on Use of Trust Fund for NRD** - No claim may be presented to the Oil Spill Fund for recovery of NRD unless: (1) "the claim is presented within 3 years after the date on which the injury and its connection with the discharge in question were reasonably discoverable with the exercise of due care" or (2) for NRD as defined by Section 1002(b)(2)(A), the date of completion of the natural resource damage assessment stipulated in Section 1006(e).
§1012(i)	**Limitation on Use of Trust Fund for NRD** - Prohibits the President from paying NRD from the Oil Spill Fund when an earlier claim for the same damages was paid by the Oil Spill Fund.
§1012(j)	**Limitation on Use of Trust Fund for NRD** - Requires that Oil Spill Fund monies be paid for the restoration, rehabilitation, replacement, or acquisition of natural resources only in accordance with a Section 1006(c) plan. However, such a plan is not required in situations "requiring action to avoid irreversible loss of natural resources or to prevent or reduce any continuing danger to natural resources or similar need for emergency action."
§1017(f)(1)	**Period in Which NRD Action May Be Brought** - An action for NRD shall be

Section	Description
	barred unless the action is brought within three years after: (1) "the date on which the loss and the connection of the loss with the discharge in question are reasonably discoverable with the exercise of due care" or (2) in the case of NRD under Section 1002(b)(2)(A), the date of completion of the NRD assessment authorized in Section 1006(e). Section 1017(f)(3)-(4) provides exceptions from the Section 1017(f)(1) limitation period for actions involving contribution and subrogation. Section 1017(f)(3) provides that no action for contribution of NRD may be commenced more than three years after: (1) the date of judgment for recovery of NRD; or (2) the date of a judicially approved settlement for NRD. Section 1017(f)(4) requires that, when a party is subrogated to a claim because that party has paid the claim, an action for recovery of those monies must be made within three years of the payment.

CHRONOLOGY:
NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) REGULATIONS UNDER CERCLA

Date	Action
12/11/1980	Comprehensive Environmental Response and Liability Act of 1980 (CERCLA) enacted; 42 U.S.C. 9601-9675
12/20/1985	Proposed Rule on Natural Resource Damage Assessment Regulations; 50 Fed. Reg. 52126
8/1/1986	U.S. Department of Interior (DOI) Type B NRDA NRDA Regulations – Final Rule Promulgated; 51 Fed. Reg. 27674
3/20/1987	DOI Type A Regulations – Final Rule promulgated; 53 Fed. Reg. 5166
2/22/1988	DOI Type A and Type B NRDA Regulations (Amendment to conform with SARA) – Final Rule promulgated; 53 Fed. Reg. 5166
3/25/1988	DOI Type A Regulations: Corrections – Final Rule promulgated; 53 Fed. Reg. 9769
7/14/2989	*State of Ohio v. U.S. Dept. of the Interior*; *State of Colorado v. U.S. Dept. of the Interior*[4], decided; 880 F.2d 432-481 (D.C. Cir. 1989)
4/29/1991	DOI rule in response to *Ohio* decision proposed; 56 Fed. Reg. 19753-19773
7/22/1993	DOI rule in response to 1991 comments and NOAA panel report proposed; 58 Fed. Reg. 39328-39357
3/25/1994	DOI Type B – Final Rule promulgated; 59 Fed. Reg. 14262-14288
5/4/1994	DOI rule on Contingent Valuation proposed; 59 Fed. Reg. 23098 – 23111
8/8/1994	DOI rule for Type A models (GLE) proposed; 59 Fed. Reg. 40319 – 40337
12/8/1994	DOI Type A Models (CME) proposed; 59 Fed. Reg. 63300 – 63325
1/17/1995	Biennial Review Comment Period Ends; 59 Fed. Reg. 52749
5/7/1996	DOI Type A Models – Final Rule promulgated (Revised Type A Procedures for coastal and marine environments and established a new procedure for the Great Lakes environment); 61 Fed. Reg. 20560 - 20614
7/16/1996	Natural Resource Damage Regulations Second Biennial Review Comment Period Begins; 61 Fed. Reg. 37031
7/16/1996	*Kennecott Utah Copper Corp. v. United States Dept. of the Interior*[5], decided; 88 F.3d 11901 (D.C. Cir. 1996)

[4] These cases challenged the original DOI Type B and Type A regulations, respectively. The court upheld some portions of those regulations and remanded others to DOI for revision. In particular, the court held that the regulations' provisions limiting NRD recover to the "lesser of" restoration costs of the lost use value of the resource was contrary to Congress's intent and thus invalid.

[5] This case challenged DOI's 1994 revised Type B regulations. The court upheld these regulations in most respects, but struck down the regulations' provision interpreting the CERCLA statute of limitations and also the provision requiring restoration of both the affected resource services and the resources themselves (held to be inconsistent with preamble to regulations).

1/16/1998	*National Association of Manufacturers v. United State Department of the Interior*[6], decided; 134 F.3d 1095 (D.C. Cir. 1998)
2/08/2000	Further Technical Corrections to DOI Type A Regulations: Corrections – Final Rule promulgated (Technical corrections to two computer models) 65 Fed. Reg. 6012
2/29/2008	US DOI Natural Resource Damages for Hazardous Substance Proposed Rule; 73 Fed. Reg. 11081
10/02/2008	US DOI Natural Resource Damages for Hazardous Substance Final Rule; 73 Fed. Reg. 57259

[6] This case challenged DOI's revised Type A regulations. The court upheld the regulations, but indicated that, in challenging the application of the Type A models in a given NRD case, PRPs may present evidence in court (rather than being limited to review on the trustee's own record).

CHRONOLOGY:
NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA)
REGULATIONS UNDER OPA

Date	Action
8/18/1990	Oil Pollution Act (OPA) enacted; 33 U.S.C. 2701-2761
1/15/1993	National Oceanic and Atmospheric Administration (NOAA) panel report on Contingent Valuation published; 58 Fed. Reg. 4610, 4601-4614
1/7/1994	NOAA rule in response to NOAA panel proposed; 59 Fed. Reg. 1062-1191
8/3/1995	NOAA rule re-proposed; 60 Fed. Reg. 39804-39834
1/5/1996	NOAA final rule promulgated; 61 Fed. Reg.440-510
11/18/1997	*General Electric Company v. United States Department of Commerce, National Oceanic and Atmospheric Administration*,[/1] decided; 128 F.3d 767 (D.C. Cir. 1997)
2/11/1998	NOAA Reconsideration of Final Rule; 63 Fed. Reg. 6846-6847
07/31/2001	NOAA published proposed amendments to the final regulation to address the remanded issues in the above case; 66 Fed. Reg. 39464
10/1/2002	NOAA promulgated its final rule relative to the remanded issues; 67 Fed. Reg. 61483

[/1] This case challenged NOAA's final regulations. The court upheld the regulations in most respects (based, on some issues, on NOAA's concessions at oral argument). However, it vacated and remanded the regulations' authorization for recovery of legal costs and the regulations' authorization for recovery of the costs of removal of residual oil.

U.S. DEPARTMENT OF THE INTERIOR NATURAL RESOURCE DAMAGE ASSESSMENT REGULATIONS UNDER CERCLA

The U.S. Department of the Interior's (DOI's) Natural Resource Damage Assessment (NRDA) regulations[7] are option procedures that trustees may use to conduct their assessment under the Comprehensive Environmental Resource, Compensation and Liability Act (CERCLA). However, a determination or assessment of damages to natural resources conducted in accordance with the regulations "shall have the force and effect of a rebuttable presumption on behalf of the trustee in any administrative or judicial proceeding under the statute"[8]. There are phases of an NRDA under the regulations: (1) Preassessment, (2) Assessment Plan, (3) Assessment Implementation and (4) Post Assessment.

(1) Preassessment Phase

The Preassessment Phase beings once trustees discover or are notified of a release or discharge that may involve natural resource injury. Natural Resource trustees (trustees) whose resources may be affected as a result of share responsibility for the resources are identified and notified. Any natural resource emergency must be reported to the National Response Center at this time. The trustees perform a Preassessment Screen in order to provide a rapid review of readily available information that focuses on resources over which they assert trusteeship, and to determine whether additional assessment work is warranted. Information must be available to form a preliminary determination that: (1) a discharge of oil or a release of a hazardous substance has occurred; (2) natural resources for which the Federal/State agency or Indian Tribe may assert trusteeship under CERCLA have been or are likely to have been adversely affected by the discharge or release; (3) the quantity and concentration of the discharged oil or released hazardous substance is sufficient to potentially cause injury to those natural resources; and (4) data sufficient to pursue an assessment are, or are likely to become available at a reasonable cost. During this phase, sampling of potentially injured natural resources is limited to early sampling in order to preserve data and materials that are likely to be lost if not collected at that time, and that will be necessary to the natural resource damage assessment. The results are documented, and if work is warranted, the Assessment Plan phase is initiated.

(2) Assessment Plan Phase

A plan for the assessment of natural resource damages must be developed if the Preassessment Phase determines that it is warranted. An Assessment Plan is therefore prepared which describes how injuries and damages will be determined for the purpose of ensuring that the assessment is performed in a planned and systematic manner and that assessment methodologies, including the Injury Determination, Quantification and Damage Determination phases can be conducted at a reasonable cost. The assessment includes specific reference to the type of assessment ("Type A"[9], "Type B"[10], or combination) that will be conducted, and serves as a reference to assess whether the approached used is likely to be cost-effective. All comments submitted must be reviewed and substantive responses must be provided. The Plan will then be modified if appropriate (additional public review may be required).

A number of factors are considered when determining which procedure will be employed. The regulations specify specific situations in which the Type A procedures may be used. If they are

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[7] 43 CFR §11.10 et seq.
[8] 43 USC §9607(f)(2)(C)
[9] See 43 CFR §11.40 et seq.
[10] See 43 CFT §11.60 et seq.

not applicable, the Type B procedures must be used. If they are, tye decision is based on the weight of "the difficulty of collecting site-specific data against the suitability of the averaged data and simplifying assumptions in the Type A procedure for the release being assessed. Type B procedures may be used if they can be performed at a reasonable cost and they provide a sufficient increase in accuracy so as to outweigh the increase in assessment costs". Both may be used if the Type B procedures: (1) are cost-effective and can be performed at a reasonable cost; (2) do not create a situation of double recover; and (3) are used only to determine damages for injuries or compensable values that do not fall into the categories addressed by the Type A procedure.

(3) Assessment Implementation Phase

Type A Procedures: Type A procedures are generally used when minimal field observation is required, due to the environment or the extent of the contamination, and limited data is required, including: the identify and amount of the substance released; the duration, time and location of the release; conditions existing at the time of release; and the extent of response actions and any closures resulting from the release. A model is then employed to determine the total damage amount. Two Type A procedures currently exist: one incorporate the Natural Resource Damage Assessment Model for Coastal and Marine Environments (NRDAM/CME) and is used for minor spills in coastal or marine areas; the other incorporate the Natural Resource Damage Assessment Model for the Great Lakes Environment (NRDAM/GLE) and is used for minor spills in teh Great Lakes. The use of Type A procedures is limited on a cap of $100,000 if the trustees wish to maintain the rebuttable presumption, as they are intended to address minor spills.

Type B Procedures: Type B procedures are based on more extensive filed observation. They rely on scientific and economic studies to determine injures and damages. They first provide that trustees must determine whether an injury has occurred, whether a pathway exists, and whether the injury was caused by the hazardous substance released ("Injury Determination Phase"); and they provide guidance and criteria for making those determinations. They then require the trustees to quantify the injury by identifying the function or services provided by the resource, determining the baseline level of those services, and provide for the determination of monetary damages ("Damage Determination Phase"). This damage determination consists of two components: (a) the cost to restore, replace or acquire the equivalent of the injured natural resources ("restoration costs"); and (b) the diminution in the value of the resources' services pending restoration ("compensable value"). The regulations specify several available methodologies for estimating these components.

In determining the appropriate restoration actions, trustees identify a reasonable number of possible restoration activities, including natural recovery. They then select one (or a combination) of those alternatives, based on a number of specified factors, which include technical feasibility, relationship of costs to benefits and consistency with response actions.

Prior to completing its assessment of restoration costs and reasonable value, trustees develop a Restoration and Compensation Determination Plan setting forth the trustees'' proposed decisions on these issues. This Plan is published for public review and comment. After comments are received and the plan is revised (if necessary), Trustees estimate the costs of implementing the selected restoration alternative and complete the compensable value determination.

(4) Post-Assessment Phase

Trustees prepare a Report of Assessment detailing the results of the Assessment Implementation Phase. The Report is presented to the potentially responsible parties (PRPS) along with a demand

for damages and reasonable assessment costs. If the PRPs do not agree not pay within 60 days of receipt of demand, the trustees may file suit. A post-assessment Restoration Plan is prepare once damages have been awarded or settlement has been reached, and an account is established for the recovered damages. Once the Restoration Plan has been drafted, it is made available for public review and comment. All comments submitted must be reviewed and substantive responses must be provided. The Plan will then be modified if appropriate (additional public review may be required). Finally, the Plan is implemented using recovered natural resource damages.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATURAL RESOURCE DAMAGE ASSESSMENT REGULATIONS

In January 1996, the National Oceanic and Atmospheric Administration (NOAA) issued procedures for the assessment of natural resource damages (NRD) under the Oil Pollution Act (OPA). NOAA's regulations[11] provide a framework for conducing Natural resource Damage Assessment (NRDAs) that achieve restoration under OPA. Any determination or assessment of damages to natural resources made by a Federal, State or Indian trustee in accordance with the regulations has the force and effect of a rebuttable presumption on behalf of the trustee in any judicial or administrative proceeding. Natural resource trustees (trustees) must coordinate their activities with other trustees, response agencies and potentially responsible parties (PRPs) when operations are conducted concurrently. PRPs must be invited to join in a cooperative assessment process. NOAA's natural resource damage assessment regulations include the following three phases: Preassessment, Restoration Planning and Restoration Implementation.

(1) Preassessment Phase

This phase is intended to provide trustees with a process to determine whether they have jurisdiction to proceed. If a trustee is determined to have jurisdiction under OPA to conduct an NRDA, the trustee(s) must determine if it likely that the discharge has caused any injury, if response actions will adequately address the injuries, and if feasible restoration alternatives exist. During this phase, trustees may collect and analyze data reasonably related to the Preassessment Phase activities, so long as it is coordinated with response actions so as not to interfere with these actions. If injuries are expected to continue and feasible restoration alternatives exist to address these injuries, trustees are to proceed with an NRDA. A Notice of Intent to Conduct Restoration Plan must be made publicly available and must be delivered to the PRPs to the extent they are known.

(2) Restoration Planning Phase

Injury Assessment: Injury assessment evaluates whether the discharge has resulted in an adverse change in natural resources or their services. Except for injuries resulting from response actions or incidents involving a substantial threat of a discharge of oil, trustees must establish whether natural resources were exposed, either directly or indirectly, to the discharged oil from the incident, and whether there is pathway linking the oil spill incident to the injury. Trustees must then quantify the injury, either in terms of the degree and spatial and temporal extent of the injury to the resource itself or in terms of the reduction in services provided by the resource. The natural recovery time for the resource (without restoration) must also be considered.

Restoration Selection: If restoration is determined to be justified, the trustee must develop and consider a reasonable range of restoration alternatives. Restoration actions include: (a) primary restoration action to return the injured resources and their services tot eh baseline condition or level; and (b) compensatory restoration actions, which are additional restoration measures designed to compensate the public for the interim loss of resources and their services pending recovery or primary restoration. The trustees must then determine the appropriate scale of the restoration actions (using scaling approaches set forth in the regulations).

After developing these restoration alternatives, the trustees evaluate them and select their preferred alternative(s) (including both primary and compensatory restoration). This evaluation and selection process is to be based on: (1) the cost to carry out the alternative; (2) the extent to

[11] 15 CFR §990.10 et seq.

which each alternative is expected to meet trustee goals and objectives; (3) the likelihood of success of each alternative; (4) the extent to which each alternative will prevent future injury and as a result of the incident and avoids collateral damage; (5) the extent to which each alternative benefits more than one natural resource and/or service; and (6) the effect of each alternative on public health and safety. Once a decision has been reached, the trustees must develop a Draft Final Restoration Plan. The Plan will describe the trustees' preassessment activities, as well as their injury assessment activities and results, an evaluation of restoration alternatives, and the identification of preferred restoration alternative(s). Opportunity for public review and comment on the Plan must be provided.

(3) Restoration Implementation

All comments submitted must be reviewed and substantive responses must be provided. The Restoration Plan will then be modified if appropriate (additional public review may be required). The Final Restoration Plan is presented to PRPs for implementation or to fund the trustees' costs for implementation. If the PRPs do not agree to this demand, the trustees may bring a judicial action for NRD.

Message

From: Kast, Lawrence [Lawrence.Kast@Honeywell.com]
Sent: 9/13/2017 3:42:08 PM
To: Kelly, Albert [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=08576e43795149e5a3f9669726dd044c-Kelly, Albe]; flavo.nicholas@epa.gov
Subject: Thanks

Honeywell Internal

Gentlemen

Thanks for taking the time to meet with us yesterday. We will be sure to stay in touch as things progress. Please let me know if I can answer any questions or provide additional information.

Best,

Larry

Lawrence Kast
Vice President, Government Relations
Honeywell
101 Constitution Ave, NW
Suite 500 West
Washington, DC 20001

Office: Ex. 6
Cell: Ex. 6

Message

From: Barbara J. Goldsmith [bjg@nrdonline.org]
Sent: 9/13/2017 12:58:04 PM
To: Barbara J. Goldsmith [bjg@nrdonline.org]
Subject: To Speakers -- Announcement/Website -- October 24, 2017 All-Day Specialty Workshop at The George Washington University
Attachments: Announcement! October 24 2017 Specialty Workshop at George Washington University.pdf

Hello Workshop Speakers!

We are delighted that you will be participating in the upcoming All-Day Specialty Workshop on Tuesday, October 24, 2017 at The George Washington University!

Please see the attached Announcement. Note the Web Link in the upper right corner which will bring you to the agenda. **If you have any desired corrections to how you are listed, please let us know via return email.**

We encourage you to forward the Announcement — via email to your distributions and/or to post the website address directly (see suggested text just below). This will help us get the word out!

PLEASE POST:
An All-Day Specialty Workshop — Blueprint for Change: New Approaches and Needed Changes to Managing Natural Resource Risks, Liabilities and Opportunities -- October 24, 2017 — The George Washington University, Washington, DC.

We have a terrific roster of speakers, moderators and topics and are looking forward to an illuminating and energetic day of presentations and discussions. We have some speaker invitations still pending but we are also interested in obtaining backups where this may be needed, so as desired please forward your suggestions relative to any place on the agenda that is currently marked "pending".

Please note that registration is complementary for speakers and we will register you. We will be back in touch later this month with further guidance concerning your remarks or role and more logistical details as well. the meantime, please feel free to be in touch if you have questions and thank you for agreeing to participate!

Best, Barbara

Barbara J. Goldsmith
President, Barbara J. Goldsmith & Company
Executive Director, Ad-Hoc Industry Natural Resource Management Group
Washington Ex. 6
Brussels Ex. 6
Mobile Ex. 6
BJG@bjgco.com or BJG@nrdonline.org
www.bjgco.com
www.nrdonline.org

All-Day Specialty Workshop

Blueprint for Change

New Approaches and Needed Changes to Managing Natural Resource Risks, Liabilities and Opportunities

Tuesday, October 24, 2017
9:00 AM to 5:30 PM

The George Washington University
Science and Engineering Hall
800 22nd Street NW
Washington, DC

Web Link
Register Now Link

Reconsidering the Relationship between Superfund and Natural Resource Damages, Minimizing the Need for Litigation, Leveraging Opportunities Spurred by Regulatory Reform, PRPs Taking Charge, Public/Private Partnering, Adaptive Management, Restoration Banks, Early Restoration Projects/Credits and Much More to be Discussed

Ad-Hoc INDUSTRY
NATURAL RESOURCE MANAGEMENT GROUP

THE GEORGE WASHINGTON UNIVERSITY
WASHINGTON, DC

Presented by

Ad-Hoc Industry Natural Resource Management Group
The George Washington University Environmental and Energy Management Institute In cooperation with: Environmental Law Institute

The Ad-Hoc Industry Natural Resource Management Group and The George Washington University Environmental and Energy Management Institute will convene A Specialty Workshop: "Blueprint for Change: New Approaches and Needed Changes to Managing Natural Resource Risks, Liabilities and Opportunities" on Tuesday, October 24, 2017 at The George Washington University's state of the art Science and Engineering Hall in Washington, DC.

The Workshop will explore what government and business can do now (potential quick victories) to cost-effectively preserve, develop and restore natural resources in the Trump Administration era and beyond. The Workshop will look at current influencers (risk, climate policy, regulatory reform, other) and current underpinnings of practice (legal, regulatory, methodological, other) of natural resource-related matters of interest to companies and other stakeholders -- now and moving forward -- as we collectively examine needed changes to result in the most effective practice possible. The Workshop will also look at some outside-the-box approaches in both public and private sectors aimed at maximizing benefits, minimizing costs and effectuating actions that can be swiftly and holistically implemented and meet or exceed programmatic or other objectives. The Workshop will result in a targeted set of actions -- both outside and inside statutory and regulatory paradigms -- especially those that can be accomplished now or soon. The Workshop will entail thought-provoking presentations and opportunity for highly interactive audience exchange. Representatives of industry and government, attorneys, consultants, academics in a variety of disciplines, persons working in think tanks and public and private sector research and conservation organizations will find this Workshop well worth their time as we develop our collective Blueprint for Change.

Message

From: Kelly, Albert [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=08576E43795149E5A3F9669726DD044C-KELLY, ALBE]
Sent: 1/10/2018 7:15:44 PM
To: Benjamin E. Quayle [bquayle@hhqventures.com]
Subject: Re: Boundary revision

I can at the end of the day. I have talked with Region 2 so it would be helpful if I can get the Regional Administrator on the phone as well

Sent from my iPhone

On Jan 10, 2018, at 9:00 AM, Benjamin E. Quayle <bquayle@hhqventures.com> wrote:

> Kell,
>
> I hope you are well. Please let me know if you have time for a call today regarding the boundary issue. If so, please let me know what time is best to speak.
>
> Thanks,
>
> Ben

From: "Albert "Kell" Kelley" <kelly.albert@epa.gov>
Date: Wednesday, January 3, 2018 at 3:33 PM
To: "Benjamin E. Quayle" <bquayle@hhqventures.com>
Subject: RE: Boundary revision

I have time before 930 and a small window at 11 if either of those work. If they do, just call my below number.

Albert Kelly
Senior Advisor to the Administrator
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Ex. 6

From: Benjamin E. Quayle [mailto:bquayle@hhqventures.com]
Sent: Wednesday, January 3, 2018 5:29 PM
To: Kelly, Albert <kelly.albert@epa.gov>
Subject: Re: Boundary revision

Thanks Kell. I have a good deal of flexibility Thursday (except b/w 11-12 eastern) and Friday. So, whatever works for your schedule.

Thanks,

Ben

From: "Albert "Kell" Kelley" <kelly.albert@epa.gov>
Date: Wednesday, January 3, 2018 at 10:41 AM
To: "Benjamin E. Quayle" <bquayle@hhqventures.com>
Subject: RE: Boundary revision

Thank you Congressman Quayle. Let me know when a convenient time to call would be

Albert Kelly
Senior Advisor to the Administrator
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Ex. 6

From: Benjamin E. Quayle [mailto:bquayle@hhqventures.com]
Sent: Friday, December 29, 2017 3:07 PM
To: Kelly, Albert <kelly.albert@epa.gov>
Subject: Boundary revision

Mr. Kelly,

I hope you are doing well and had a great Christmas. I wanted to provide you a brief update on Troy Corp and request a brief call at your convenience.

Troy and Region 2 are working well together to determine the proper remedy for its site. Troy has submitted various documentation to the Region and they have agreed to provide responses in a timely fashion.

One thing I would like to discuss with you is regarding the boundary definition for Pierson's Creek NPL listing. As the attached memo details, Troy's plant site has already been carved out for separate remediation from the broader superfund site. Troy has voluntarily entered an AOC to work with EPA to determine the remedy for its site.

Troy looks forward to quickly and efficiently remediating its site. However, its inclusion in the boundary for the Pierson's Creek NPL listing continues to be a stigma on the company and has a negative impact on its business. Troy would like to discuss the possibility of redefining the boundaries so that it does not include its operational plant site which is under a separate AOC to remediate.

Troy currently has an appeal of the NPL listing that has been stayed pending negotiations. However, they need to provide guidance on whether they plan to continue its appeal by January 18, 2018. Consequently, it would be helpful if we could schedule a meeting with the proper folks at EPA HQ to discuss this matter the week of January 8th, 2018.

Thanks for considering this. If I don't speak to you beforehand, I hope you and your family have a Happy New Year.

Best,

Ben

Hon. Ben Quayle
Partner
HHQ Ventures, LLC

M: Ex. 6

Message

From: Kelly, Albert [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=08576E43795149E5A3F9669726DD044C-KELLY, ALBE]
Sent: 11/6/2017 9:49:03 PM
To: Amy S. Plaster [AMY.PLASTER@cmsenergy.com]
Subject: RE: CMS Meeting on Superfund Site/Visit to Pumped Hydro Storage Facility

How about 1 pm Thursday the 9th?

Albert Kelly
Senior Advisor to the Administrator
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Ex. 6

From: Amy S. Plaster [mailto:AMY.PLASTER@cmsenergy.com]
Sent: Monday, November 6, 2017 4:40 PM
To: Kelly, Albert <kelly.albert@epa.gov>
Subject: RE: CMS Meeting on Superfund Site/Visit to Pumped Hydro Storage Facility

Thank you for the quick reply. I would like to arrange a call with our internal counsel on the matter. Would you be amenable to that? If so, would later this week or early next? Thank you! Amy

Amy Plaster
CMS Energy
Ex. 6 (O)
(C)

From: Kelly, Albert [mailto:kelly.albert@epa.gov]
Sent: Monday, November 6, 2017 4:29 PM
To: Amy S. Plaster; Bolen, Brittany
Cc: Fisher, Emily; Kiran L. Malone; Dravis, Samantha
Subject: RE: CMS Meeting on Superfund Site/Visit to Pumped Hydro Storage Facility

Hello Amy, I look forward to discussing with you. When is a convenient time?

Albert Kelly
Senior Advisor to the Administrator
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Ex. 6

From: Amy S. Plaster [mailto:AMY.PLASTER@cmsenergy.com]
Sent: Monday, November 6, 2017 4:13 PM
To: Bolen, Brittany <bolen.brittany@epa.gov>
Cc: Fisher, Emily <EFisher@eei.org>; Kiran L. Malone <Kiran.Malone@cmsenergy.com>; Kelly, Albert <kelly.albert@epa.gov>; Dravis, Samantha <dravis.samantha@epa.gov>
Subject: RE: CMS Meeting on Superfund Site/Visit to Pumped Hydro Storage Facility

Thank you Brittany! Kel, I look forward to touching base on the Bay Harbor issue. Please let me know how best to proceed.

Samantha, who should we be in touch with about the offer for a site visit to our Ludington Pumped Storage facility? Thanks! Amy

Amy Plaster
CMS Energy
Ex. 6 (O)
(C)

From: Bolen, Brittany [mailto:bolen.brittany@epa.gov]
Sent: Monday, November 6, 2017 4:10 PM
To: Amy S. Plaster
Cc: Fisher, Emily; Kiran L. Malone; Kelly, Albert; Dravis, Samantha
Subject: Re: CMS Meeting on Superfund Site/Visit to Pumped Hydro Storage Facility

Hi Amy, and Emily -
Thank you for your email. I am connecting you with my colleague, Albert "Kel" Kelly (cc'd), who leads the Administrator's Superfund Task Force and is your best point of contact on these issues.
Best,
Brittany

On Nov 2, 2017, at 9:56 PM, Amy S. Plaster <AMY.PLASTER@cmsenergy.com> wrote:

> Thank you for the e-mail and introduction, Emily. Brittany, we would appreciate an opportunity to touch base on these two items. Thanks! Amy
>
> Amy Plaster
> CMS Energy
> Ex. 6 (O)
> (C)
>
> ---
>
> **From:** Fisher, Emily [mailto:EFisher@eei.org]
> **Sent:** Thursday, November 2, 2017 11:47 AM
> **To:** Bolen.brittany@epa.gov
> **Cc:** Amy S. Plaster; Kiran L. Malone
> **Subject:** CMS Meeting on Superfund Site/Visit to Pumped Hydro Storage Facility
>
>
>
> Good morning, Brittany,
>
> EEI appreciated Samantha Dravis's participation in our External Affairs conference last week. During her remarks, she highlighted, among other things, the Administrator's interest in Superfund Sites and his interest in visiting energy infrastructure in the U.S. EEI member CMS, which is located in Michigan, would appreciate the opportunity to talk to you about a Superfund Site issue in Michigan and would like to extend an invitation to EPA to visit their pumped hydro storage facility. I've copied Amy Plaster and Kiran Malone from CMS's Washington office on this e-mail so that they can continue this conversation with you and answer any questions that you may have. Thank you.

Best regards,

Emily Fisher

Emily Sanford Fisher
Vice President, Law
Corporate Secretary
701 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2696

Ex. 6

www.eei.org

Follow EEI on Twitter, Facebook, and YouTube.

<image001.jpg>

Message

From: Kelly, Albert [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=08576E43795149E5A3F9669726DD044C-KELLY, ALBE]
Sent: 8/22/2017 3:35:07 PM
To: Benjamin E. Quayle [bquayle@hhqventures.com]
Subject: RE: Memo regarding issues with AOC

Thank you Congressman. I am talking with the Region and will contact you as soon as I can have a discussion with them

Albert Kelly
Senior Advisor to the Administrator
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Ex. 6

From: Benjamin E. Quayle [mailto:bquayle@hhqventures.com]
Sent: Wednesday, August 16, 2017 6:43 PM
To: Kelly, Albert <kelly.albert@epa.gov>
Subject: Memo regarding issues with AOC

Mr. Kelly,

Attached please find a memo regarding the outstanding issues Troy Corp has with the Administrative Order on Consent they received from Region 2. Additionally, as you might be aware, Region 2 gave Troy a deadline of September 6th to sign the AOC or the Region would pursue alternative enforcement mechanisms.

Considering this quickly approaching deadline, Troy would respectfully request a deadline extension of between 60 and 90 days so it could continue to work with EPA to resolve the issues discussed in the attached document.

Troy is ready and willing to resolve and remediate its site and looks forward to working with EPA on these issues.

Please feel free to contact me with any questions.

Best,

Ben Quayle

Hon. Ben Quayle
Partner
HHQ Ventures, LLC
M: Ex. 6

Message

From: Kelly, Albert [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=08576E43795149E5A3F9669726DD044C-KELLY, ALBE]
Sent: 8/22/2017 1:40:39 PM
To: Van Hook, D. Evan [Evan.VanHook@honeywell.com]
CC: Melvin, Karen [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=b65f9758d726421185d69f59824f8dee-Kmelvin]
Subject: RE: September 7 Speaking Engagement in Philadelphia

Hello Mr. Van Hook, sorry that I did not communicate clearly on this. My fault. I believe that Karen Melvin who is a veteran EPA official and is both the Region 3 Superfund Director and a Captain on the Superfund Task Force is scheduled to speak. I have copied her on this so that you and she can connect. Thank you very much for the opportunity. The good news for the conference is that Karen is much smarter and more articulate than I. Let me know if I can help in any other ways.

Albert Kelly
Senior Advisor to the Administrator
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Ex. 6

From: Van Hook, D. Evan [mailto:Evan.VanHook@honeywell.com]
Sent: Tuesday, August 22, 2017 6:28 AM
To: Kelly, Albert <kelly.albert@epa.gov>
Subject: September 7 Speaking Engagement in Philadelphia

Chairman Kelly: I wondered if you have had time to consider whether you or someone on your staff might be able to speak on EPA's CERCLA Taskforce in Philadelphia on September 7. I can completely understand if there is just too much going on!

Thanks,

Evan

D. Evan van Hook
Corporate V.P.
Health, Safety, Environment,
Product Stewardship and Sustainability
Honeywell
115 Tabor Road
Morris Plains, NJ 07950
Ex. 6

Message

From: Kelly, Albert [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=08576E43795149E5A3F9669726DD044C-KELLY, ALBE]
Sent: 11/9/2017 9:25:02 PM
To: Amy S. Plaster [AMY.PLASTER@cmsenergy.com]
Subject: RE: CMS Meeting on Superfund Site/Visit to Pumped Hydro Storage Facility

Hello Amy. Just following up. Do you have any time that you would like to have a discussion?

Albert Kelly
Senior Advisor to the Administrator
1200 Pennsylvania Avenue, NW
Washington, DC 20460
202 306 8830

From: Amy S. Plaster [mailto:AMY.PLASTER@cmsenergy.com]
Sent: Monday, November 6, 2017 4:40 PM
To: Kelly, Albert <kelly.albert@epa.gov>
Subject: RE: CMS Meeting on Superfund Site/Visit to Pumped Hydro Storage Facility

Thank you for the quick reply. I would like to arrange a call with our internal counsel on the matter. Would you be amenable to that? If so, would later this week or early next? Thank you! Amy

Amy Plaster
CMS Energy
Ex. 6 (O)
(C)

From: Kelly, Albert [mailto:kelly.albert@epa.gov]
Sent: Monday, November 6, 2017 4:29 PM
To: Amy S. Plaster; Bolen, Brittany
Cc: Fisher, Emily; Kiran L. Malone; Dravis, Samantha
Subject: RE: CMS Meeting on Superfund Site/Visit to Pumped Hydro Storage Facility

Hello Amy, I look forward to discussing with you. When is a convenient time?

Albert Kelly
Senior Advisor to the Administrator
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Ex. 6

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Sent: Monday, November 6, 2017 4:13 PM
To: Bolen, Brittany <bolen.brittany@epa.gov>
Cc: Fisher, Emily <EFisher@eei.org>; Kiran L. Malone <Kiran.Malone@cmsenergy.com>; Kelly, Albert <kelly.albert@epa.gov>; Dravis, Samantha <dravis.samantha@epa.gov>
Subject: RE: CMS Meeting on Superfund Site/Visit to Pumped Hydro Storage Facility

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Samantha, who should we be in touch with about the offer for a site visit to our Ludington Pumped Storage facility? Thanks! Amy

Amy Plaster
CMS Energy
Ex. 6 (O)
(C)

From: Bolen, Brittany [mailto:bolen.brittany@epa.gov]
Sent: Monday, November 6, 2017 4:10 PM
To: Amy S. Plaster
Cc: Fisher, Emily; Kiran L. Malone; Kelly, Albert; Dravis, Samantha
Subject: Re: CMS Meeting on Superfund Site/Visit to Pumped Hydro Storage Facility

Hi Amy, and Emily -
Thank you for your email. I am connecting you with my colleague, Albert "Kel" Kelly (cc'd), who leads the Administrator's Superfund Task Force and is your best point of contact on these issues.
Best,
Brittany

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> Thank you for the e-mail and introduction, Emily. Brittany, we would appreciate an opportunity to touch base on these two items. Thanks! Amy
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> Amy Plaster
> CMS Energy
> Ex. 6 (O)
> (C)
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> **From:** Fisher, Emily [mailto:EFisher@eei.org]
> **Sent:** Thursday, November 2, 2017 11:47 AM
> **To:** Bolen.brittany@epa.gov
> **Cc:** Amy S. Plaster; Kiran L. Malone
> **Subject:** CMS Meeting on Superfund Site/Visit to Pumped Hydro Storage Facility
>
>
>
> Good morning, Brittany,
>
> EEI appreciated Samantha Dravis's participation in our External Affairs conference last week. During her remarks, she highlighted, among other things, the Administrator's interest in Superfund Sites and his interest in visiting energy infrastructure in the U.S. EEI member CMS, which is located in Michigan, would appreciate the opportunity to talk to you about a Superfund Site issue in Michigan and would like to extend an invitation to EPA to visit their pumped hydro storage facility. I've copied Amy Plaster and Kiran Malone from CMS's Washington office on this e-mail so that they can continue this conversation with you and answer any questions that you may have. Thank you.

Best regards,

Emily Fisher

Emily Sanford Fisher
Vice President, Law
Corporate Secretary
701 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-2696

Ex. 6

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<image001.jpg>

Message

From: Kelly, Albert [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=08576E43795149E5A3F9669726DD044C-KELLY, ALBE]
Sent: 8/10/2017 12:04:25 PM
To: Benjamin E. Quayle [bquayle@hhqventures.com]
Subject: RE: Superfund Task Force Report--Troy Corp

Hello Congressman, I just tried your office. When you have time, if you would call me I would appreciate it

Albert Kelly
Senior Advisor to the Administrator
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Ex. 6

From: Benjamin E. Quayle [mailto:bquayle@hhqventures.com]
Sent: Wednesday, August 9, 2017 9:08 PM
To: Kelly, Albert <kelly.albert@epa.gov>
Subject: Re: Superfund Task Force Report--Troy Corp

No problem. Thanks for getting back to me. I can do a call in the morning before 11 eastern or after 4:30 eastern. I also have a lot of flexibility on Friday if that works better for you.

Thanks,

Ben

Sent from my iPhone

On Aug 9, 2017, at 5:53 PM, Kelly, Albert <kelly.albert@epa.gov> wrote:

> Sorry Congressman. I will make time on Thursday if you will let me know some times you are free.
>
> Albert Kelly
> Senior Advisor to the Administrator
> 1200 Pennsylvania Avenue, NW
> Washington, DC 20460
> **Ex. 6**
>
> **From:** Benjamin E. Quayle [mailto:bquayle@hhqventures.com]
> **Sent:** Wednesday, August 9, 2017 9:48 AM
> **To:** Kelly, Albert <kelly.albert@epa.gov>
> **Subject:** Re: Superfund Task Force Report--Troy Corp
>
> Albert,
>
> I wanted to follow up on this from last week. Please let me know if you have some time for a call in the near future.
>
> Thanks,

Ben

From: "Kelly, Albert" <kelly.albert@epa.gov>
Date: Wednesday, August 2, 2017 at 9:00 AM
To: "Benjamin E. Quayle" <bquayle@hhqventures.com>
Subject: RE: Superfund Task Force Report--Troy Corp

Thank you Congressman, would you have time for a call later this afternoon?

Albert Kelly
Senior Advisor to the Administrator
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Ex. 6

From: Benjamin E. Quayle [mailto:bquayle@hhqventures.com]
Sent: Wednesday, August 2, 2017 11:44 AM
To: Kelly, Albert <kelly.albert@epa.gov>; Falvo, Nicholas <falvo.nicholas@epa.gov>
Cc: Rashid G. Hallaway <rhallaway@hhqventures.com>; Dewey, Amy <Dewey.Amy@epa.gov>
Subject: Superfund Task Force Report--Troy Corp

Albert/Nick,

Congratulations on completing the Superfund Task Report. I am eager to see the report's recommendations implemented soon.

In that regard, we reviewed the Report and noticed that several recommendations in the Task Force Report support allowing Troy to proceed quickly to final remedy selection. Some of the recommendations and how it fits into Troy's plan are noted below.

- Recommendation 1: Establish metrics on all sites to track progress, including PRP lead, length of time to estimated partial or complete deletion, costs anticipated, etc.; Develop project timelines and exit strategies; and, track and report progress on achieving/meeting timelines.
    - ***Troy has requested that Region 2 agree to an expedited schedule to achieve remedy selection and implementation.***
- Recommendation 5: Clarify Priorities for RI/FS Resources.
    - ***Troy believes sufficient information exists to develop a complete RI/FS without significant additional work. Additional data requested by USEPA Region 2 is not likely to change the outcome.***
- Recommendation 16: Develop a plan to provide financial incentives in the form of reduced oversight to PRPs who perform timely, quality work under an agreement by reducing the costs associated with EPA's oversight, including adjustments to indirect costs. Establish and promote strict adherence to project deadlines.
    - ***Troy has proposed a schedule to Region 2 that includes deadlines applicable to all parties.***

- Recommendation 21: Facilitate site redevelopment during cleanup by encouraging PRPs to fully integrate and implement reuse opportunities into investigations and cleanups of NPL sites.

    - ***Troy's approach to the investigation and remediation of its Newark site will allow for the continuation and expansion of chemical manufacturing operations. Other approaches, even if possible, would jeopardize these operations.***

Troy is prepared to address contamination pursuant to the cost-effective approach contemplated by the Task Force Report. We appreciate your work on these matters and look forward to working with the EPA to remedy the issues at Troy's site. Please let me or Rashid know if you have any questions or comments.

Best,

Ben Quayle

Hon. Ben Quayle
Partner
HHQ Ventures, LLC
M: Ex. 6

Message

From: Kelly, Albert [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=08576E43795149E5A3F9669726DD044C-KELLY, ALBE]
Sent: 11/5/2017 10:02:00 PM
To: Benjamin E. Quayle [bquayle@hhqventures.com]
CC: Al Gerardo [gerardoa@troycorp.com]; Rashid G. Hallaway [rhallaway@hhqventures.com]
Subject: Re: Troy Update

Thank you Congressman. Perhaps we can visit this week

Sent from my iPad

> On Nov 3, 2017, at 5:23 PM, Benjamin E. Quayle <bquayle@hhqventures.com> wrote:
>
> Mr. Kelly,
>
> I hope you are doing well. I wanted to let you know that Troy executed the AOC with Region 2 today. As the document attached states, Troy still has some ongoing concerns, however, they want to move the process forward and get to a remedy that works for all parties as quickly as possible.
>
> I will be reaching out to you to keep you apprised of this matter. I want to thank you for all of your help and look forward to working with you in the future. Have a great weekend.
>
> Best,
>
> Ben
>
> Hon. Ben Quayle
> Partner
> HHQ Ventures, LLC
> M: Ex. 6
> <ScanAttachment - 1[1].pdf>

Message

From: Kelly, Albert [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=08576E43795149E5A3F9669726DD044C-KELLY, ALBE]
Sent: 7/2/2017 4:18:34 PM
To: Rashid G. Hallaway [rhallaway@hhqventures.com]
CC: Benjamin E. Quayle [bquayle@hhqventures.com]; Dewey, Amy [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=fc3a7e01b12f4aeba5d34b813df8112a-Dewey, Amy]; Falvo, Nicholas [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=424ac90ea7d8494a93209d14d37f2946-Falvo, Nich]
Subject: Re: Thank You

Thanks Rashid. We appreciate the relationship and will be back in touch.

Sent from my iPad

> On Jun 30, 2017, at 12:40 PM, Rashid G. Hallaway <rhallaway@hhqventures.com> wrote:
>
> Albert,
>
> Ben and I want to thank you, Nick and Amy for a constructive meeting on Wednesday. We appreciated you being so generous with your time and willingness to consider an alternative approach.
>
> As we discussed, the company is willing to bring in engineers and outside consultants to answer any questions or concerns. Please don't hesitate to call me directly at Ex. 6 (mobile) if you have any questions or need additional information.
>
> I do not have Nick's email so please extend our thanks and appreciation to him as well. I hope you have good and safe 4th of July.
>
> Thank you again.
>
> RH
>
>
>
> Rashid Hallaway
> Ex. 6 (mobile)
>
>
>
>

Message

From: Kelly, Albert [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=08576E43795149E5A3F9669726DD044C-KELLY, ALBE]
Sent: 8/15/2017 11:57:55 PM
To: Van Hook, D. Evan [Evan.VanHook@honeywell.com]
CC: Morris, John [John.Morris@honeywell.com]
Subject: Re: Superfund Conference, September 7, 2017

Thanks. I will check and get back to you.

Sent from my iPad

On Aug 14, 2017, at 5:47 PM, Van Hook, D. Evan <Evan.VanHook@honeywell.com> wrote:

> Task Force Chairman Kelly,
>
> Honeywell appreciates the opportunity we had, through the industry group AROW, to contribute to the important work of the CERCLA Task Force. We are impressed with the Recommendations and are excited about the prospect of moving our CERCLA sites more quickly through the process.
>
> The Recommendations have created a good deal of enthusiasm within the industrial sectors that we interact with. That enthusiasm will be evident at the upcoming "Mega-Superfund Site Symposium" on September 7, 2017 in Philadelphia (agenda and information attached). Honeywell is working with George Rusk of Ecology and Environment, on behalf of the Symposium's sponsors, to finalize the speakers' list. We thought it would be a great opportunity for you or someone from your staff to talk publicly about the Task Force's recommendations.
>
> The keynote speaker is being held open (9:40 on the enclosed agenda) in the hopes you or someone from your senior staff will fill the slot. There is also an opening for a speaker in a panel forum that is titled "Great Lakes Legacy Act, Superfund Reform and Lessons Learned from the Hudson River." Someone from your Task Force team might find that forum interesting from a number of perspectives; Panel Forum is at 2:25 on the 7th.
>
> We all understand that you and the EPA staff have many commitments. While we acknowledge that our offer does not provide much lead time this is a very opportune time to be interacting with an audience that has so much vested in the success of the CERCLA process.
>
> Please let me know your interest in this offer. Thank you for the consideration.
>
> D. Evan van Hook
> Corporate V.P.
> Health, Safety, Environment,
> Product Stewardship and Sustainability
> Honeywell
> 115 Tabor Road

Morris Plains, NJ 07950

Ex. 6

<AIRROC EECMA Agenda 8 9 17.pdf>

Message

From: Kelly, Albert [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=08576E43795149E5A3F9669726DD044C-KELLY, ALBE]
Sent: 9/6/2017 9:06:55 PM
To: Benjamin E. Quayle [bquayle@hhqventures.com]
Subject: Re: Troy update

I will find out and let you know

Sent from my iPhone

On Sep 6, 2017, at 3:22 PM, Benjamin E. Quayle <bquayle@hhqventures.com> wrote:

> Mr. Kelly,
>
> Troy has received an invitation to meet with Region 2 officials next week on September 14th. Troy has accepted this invitation in hopes that this will move the process forward. However, they still have not received official notification of the 90-day extension.
>
> If there are still outstanding issues after the meeting, we respectfully ask to have a joint meeting between Troy, Region 2 and officials from EPA HQ in the near future. We look forward to working with the EPA to remediate these issues. Thanks for your consideration.
>
> Best,
>
> Ben
>
> Hon. Ben Quayle
> HHQ Ventures, LLC
> M: **Ex. 6**

Message

From: Kelly, Albert [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=08576E43795149E5A3F9669726DD044C-KELLY, ALBE]
Sent: 7/20/2017 5:35:05 PM
To: Rashid G. Hallaway [rhallaway@hhqventures.com]; Falvo, Nicholas [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=424ac90ea7d8494a93209d14d37f2946-Falvo, Nich]
CC: Dewey, Amy [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=fc3a7e01b12f4aeba5d34b813df8112a-Dewey, Amy]; Benjamin E. Quayle [bquayle@hhqventures.com]
Subject: RE: Troy-Region 2 Follow Up

Thanks Rashid, I am speaking with the Region today at 4. I may have more information after that call. I do not necessarily control the letter process but will see what I can do.

Albert Kelly
Senior Advisor to the Administrator
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Ex. 6

-----Original Message-----
From: Rashid G. Hallaway [mailto:rhallaway@hhqventures.com]
Sent: Thursday, July 20, 2017 1:23 PM
To: Kelly, Albert <kelly.albert@epa.gov>; Falvo, Nicholas <falvo.nicholas@epa.gov>
Cc: Dewey, Amy <Dewey.Amy@epa.gov>; Benjamin E. Quayle <bquayle@hhqventures.com>
Subject: Troy-Region 2 Follow Up

Albert/Nick,

I want to let you know that Troy's counsel had a call with Region 2 Assistant Regional Counsel Amelia Wagner about the Troy Chemical Newark Manufacturing Plant site. The discussion focused on Troy's June 23 letter to Region 2, which outlined Troy's principal concerns with EPA's proposed AOC.

During the call, Ms. Wagner said that Region 2 most likely would not agree to most of Troy's requests. She also stated that Region 2 management asked her to formally respond to our letter and we should expect that written response next week.

We are concerned that what we will receive from Region 2 is a "take it or leave it" AOC that rigidly adheres to the Model AOC terms and offers no flexibility in response to Troy's unique situation. Given Region 2's inflexibility, we request that Ms. Wagner refrain from sending a formal response, and that you elevate the AOC to EPA HQ so you have sufficient time to review Troy's proposal.

We recognize the lack of appointees at OLEM and Region 2 is challenging on a number of levels and are grateful for your thoughtful consideration. Please do not hesitate to call me at Ex. 6 if you have any questions.

Thank you for your help.

Rashid